DIGIEVER

Network Video Recorder

User Manual

1.0.0.25

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Chapter 1. Introduction

Before You Use This Product

When you first open the product’s package, verify that all the accessories listed on the “Package Contents” of “Quick Installation Guide” are included. Before installing the NVR, please read the instructions in the “Quick Installation Guide” to avoid misuse and then follow the instructions in the “Hard Disk Installation” section to avoid damages due to faulty assembly or installation.

1.1 Hardware Description

1.1.1 DS-2000 Series

DS-2005/DS-2009/DS-2012/DS-2016/DS-2020/DS-2025/DS-2032

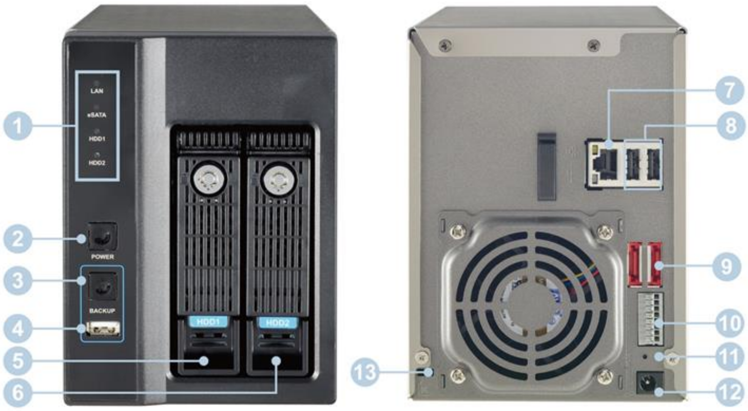
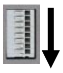

1
LAN
eSATA
HDD1
HDD2
2
POWER
3
BACKUP
4
5
6
HDD1
HDD2
7
8
9
10
11
12
13

Figure 1-1. Front & Rear View of DS-2000 Series

1. Figure LED indicators: LAN, eSATA, HDD1, HDD2
2. Power button
3. USB BACKUP button- Auto video backup
4. USB 2.0 X1(Support auto video backup)
5. HDD1
6. HDD2
7. Gigabit LAN
8. USB 2.0 x 2
9. eSATA x 2
10. DI/DO (4 in 2 out)

     Top to bottom: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO-1, DO-2

11. Reset button*
12. Power connector
13. K-lock security slot

1.1.2 DS-4000 Series

DS-4005/DS-4009/DS-4012/DS-4016/DS-4020/ DS-4025/ DS-4032

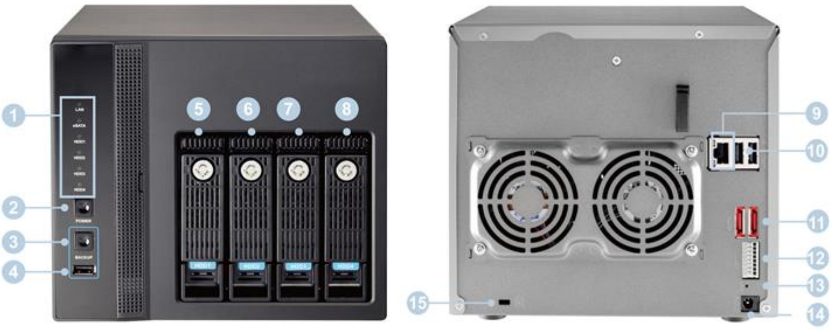
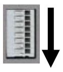


Figure 1-2. Front & Rear View of DS-4000 Series

1. LED indicators: LAN, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button- Auto video backup
4. USB 2.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. Gigabit LAN
10. USB 2.0 x 2
11. eSATA x 2
12. DI/DO (4 in 2 out)

    
    Top to bottom: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO-1, DO-2

13. Reset button*
14. Power connector
15. K-lock security slot

1.1.3 DS-1100 Pro Series

DS-1105 Pro/ DS-1109 Pro/ DS-1112 Pro/ DS-1116 Pro/ DS-1120 Pro/ DS-1125 Pro/ DS-1132 Pro/ DS-1136 Pro

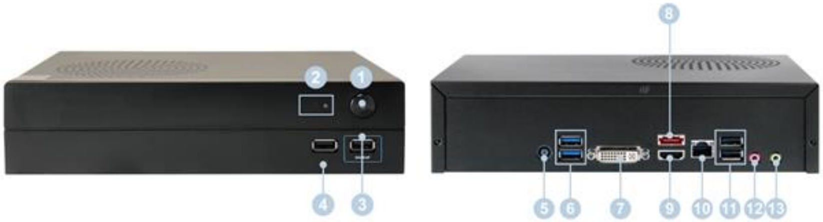


Figure 1-3. Front & Rear View of DS-1100 Pro Series

1. Power button
2. LED indicators: HDD
3. USB 2.0 x1 (Support auto video backup)
4. USB 2.0 x1
5. Power connector
6. USB 3.0 x 2
7. DVI-I
8. eSATA x 1
9. HDMI x 1
10. Gigabit LAN
11. USB 2.0 x 2
12. Audio mic input (reserved)
13. Audio output (reserved)

1.1.4 DS-2100 Pro Series

DS-2105 Pro/ DS-2109 Pro/ DS-2112 Pro/ DS-2116 Pro/ DS-2120 Pro/ DS-2125 Pro/ DS-2132 Pro/ DS-2136 Pro

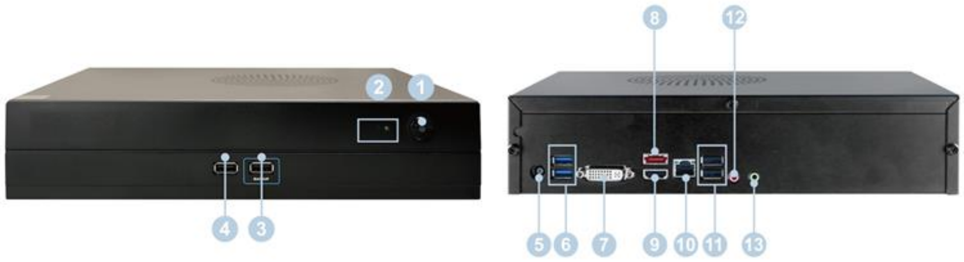


Figure 1-4. Front & Rear View of DS-2100 Pro Series

1. Power button
2. LED indicators: HDD
3. USB 2.0 x1 (Support auto video backup)
4. USB 2.0 x1
5. Power connector
6. USB 3.0 x 2
7. DVI-I
8. eSATA x 1
9. HDMI x 1
10. Gigabit LAN
11. USB 2.0 x 2
12. Audio mic input (reserved)
13. Audio output (reserved)

1.1.5 DS-4200 Pro Series

DS-4205 Pro/ DS-4209 Pro/ DS-4212 Pro/ DS-4216 Pro/ DS-4220 Pro/ DS-4225 Pro/ DS-4232 Pro/ DS-4236 Pro

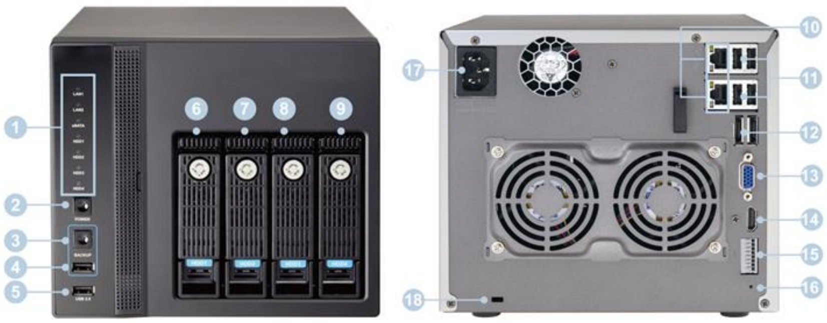
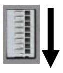


Figure 1-5. Front & Rear View of DS-4200 Pro Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 2.0 x 1(Support auto video backup)
5. USB 2.0 x 1
6. HDD1
7. HDD2
8. HDD3
9. HDD4
10. Gigabit LAN x 2
11. USB 2.0 x 4
12. eSATA x 2
13. VGA output
14. HDMI output
15. DI/DO (4 in 2 out)



Top to bottom: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO-1, DO-2

16. Reset button*
17. Power connector
18. K-lock security slot

1.1.6 DS-4200-RM Pro Series

DS-4209-RM Pro/ DS-4212-RM Pro/ DS-4216-RM Pro/ DS-4220-RM Pro/
DS-4225-RM Pro/ DS-4232-RM Pro/ DS-4236-RM Pro

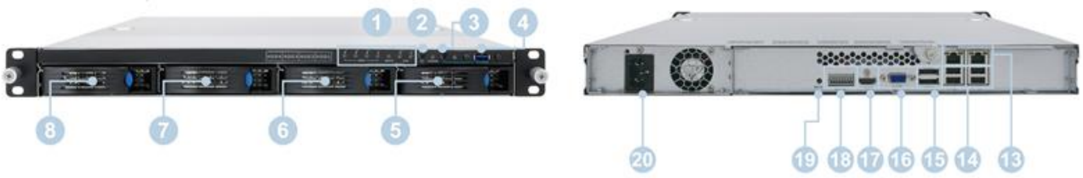
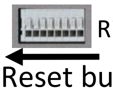


Figure 1-6. Front & Rear View of DS-4200-RM Pro Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. Gigabit LAN x 2
10. USB 2.0 x 4
11. eSATA x 2
12. VGA output
13. HDMI output
14. DI/DO (4 in 2 out)



Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

15. Reset button*
16. Power connector

1.1.7 DS-4200-RMP Pro Series

DS-4209-RMP Pro/ DS-4212-RMP Pro/ DS-4216-RMP Pro/ DS-4220-RMP Pro/
DS-4225-RMP Pro/ DS-4232-RMP Pro/ DS-4236-RMP Pro

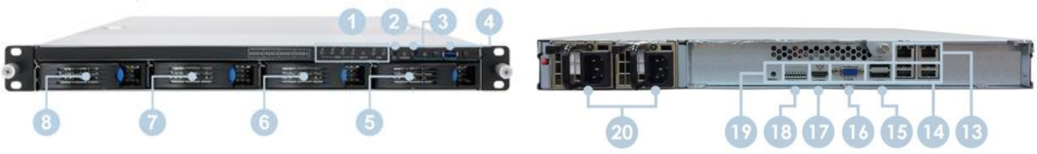
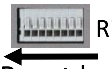


Figure 1-7. Front & Rear View of DS-4200-RMP Pro Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. Gigabit LAN x 2
10. USB 2.0 x 4
11. eSATA x 2
12. VGA output
13. HDMI output
14. DI/DO (4 in 2 out)


Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

15. Reset button*
16. Power connector

⚠ **Note:** The redundant power (with two adaptors) will be indicated in green light in the rear panel of DS-4200-RMP Pro series. Once one of the adaptors is failed, system buzzer will start beeping and no LED indicator light will display in rear panel. To stop the buzzer, please press the red button in the rear panel of system.

1.1.8 DS-8200-RM Pro Series

DS-8209-RM Pro/ DS-8212-RM Pro/ DS-8216-RM Pro/ DS-8220-RM Pro/
DS-8225-RM Pro/ DS-8232-RM Pro/ DS-8236-RM Pro

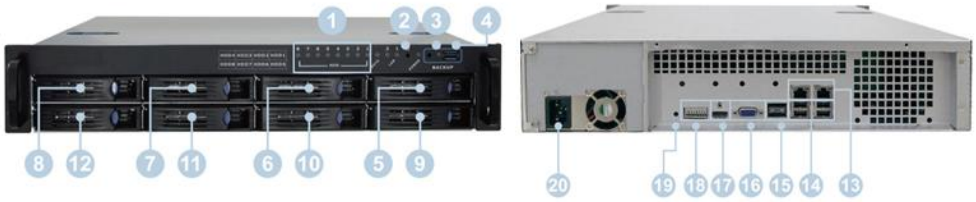
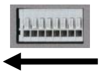


Figure 1-8. Front & Rear View of DS-8200-RM Pro Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)



Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

19. Reset button*
20. Power connector

1.1.9 DS-8200-RMP Pro Series

DS-8209-RMP Pro/ DS-8212-RMP Pro/ DS-8216-RMP Pro/ DS-8220-RMP Pro/
DS-8225-RMP Pro/ DS-8232-RMP Pro/ DS-8236-RMP Pro

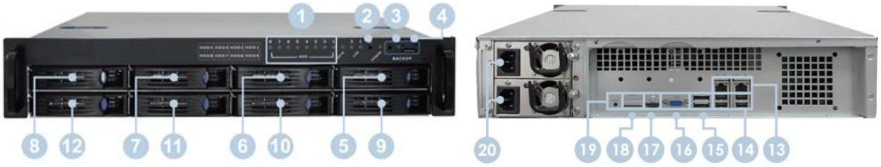


Figure 1-9. Front & Rear View of DS-8200-RMP Pro Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)

Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

19. Reset button*
20. Power connector

⚠ **Note:** The redundant power (with two adaptors) will be indicated in green light in the rear panel of DS-8200-RMP Pro series. Once one of the adaptors is failed, system buzzer will start beeping and no LED indicator light will display in rear panel. To stop the buzzer, please press the red button in the rear panel of system.

1.1.10 DS-1100 Pro+ Series

DS-1105 Pro+/ DS-1109 Pro+/ DS-1112 Pro+/ DS-1116 Pro+/ DS-1120 Pro+/ DS-1125 Pro+/ DS-1132 Pro+/ DS-1136 Pro+/ DS-1142 Pro+/ DS-1149 Pro+/ DS-1156 Pro+/ DS-1164 Pro+

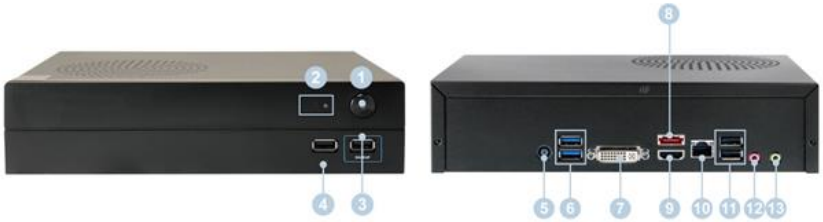


Figure 1-10. Front & Rear View of DS-1100 Pro+ Series

1. Power button
2. LED indicators: HDD
3. USB 2.0 x1 (Support auto video backup)
4. USB 2.0 x1
5. Power connector
6. USB 3.0 x 2
7. DVI-I
8. eSATA x 1
9. HDMI x 1
10. Gigabit LAN
11. USB 2.0 x 2
12. Audio mic input (reserved)
13. Audio output (reserved)

1.1.11 DS-2100 Pro+ Series

DS-2105 Pro+/ DS-2109 Pro+/ DS-2112 Pro+/ DS-2116 Pro+/ DS-2120 Pro+/ DS-2125 Pro+/ DS-2132 Pro+/ DS-2136 Pro+/ DS-2142 Pro+/ DS-2149 Pro+/ DS-2156 Pro+/ DS-2164 Pro+

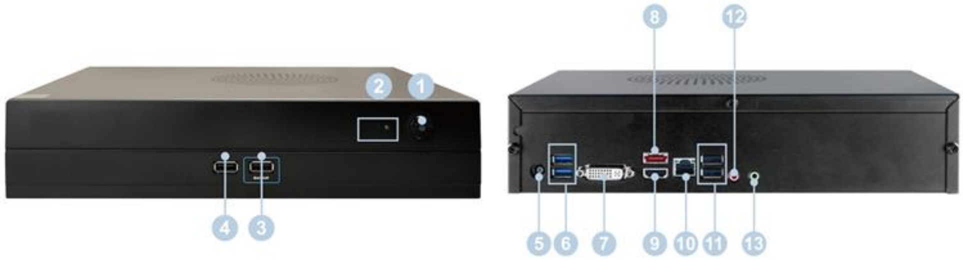


Figure 1-11. Front & Rear View of DS-2100 Pro+ Series

1. Power button
2. LED indicators: HDD
3. USB 2.0 x1 (Support auto video backup)
4. USB 2.0 x1
5. Power connector
6. USB 3.0 x 2
7. DVI-I
8. eSATA x 1
9. HDMI x 1
10. Gigabit LAN
11. USB 2.0 x 2
12. Audio mic input (reserved)
13. Audio output (reserved)

1.1.12 DS-4200 Pro+ Series

DS-4205 Pro+/ DS-4209 Pro+/ DS-4212 Pro+/ DS-4216 Pro+/ DS-4220 Pro+/ DS-4225 Pro+/ DS-4232 Pro+/ DS-4236 Pro+/ DS-4242 Pro+/ DS-4249 Pro+/ DS-4256 Pro+/ DS-4264 Pro+

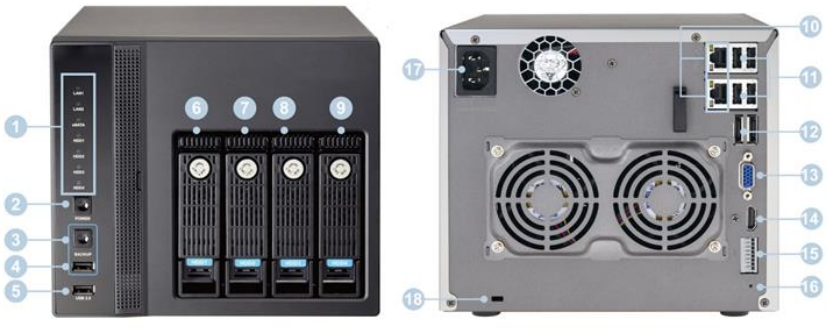
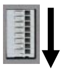


Figure 1-12. Front & Rear View of DS-4200 Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 2.0 x 1(Support auto video backup)
5. USB 2.0 x 1
6. HDD1
7. HDD2
8. HDD3
9. HDD4
10. Gigabit LAN x 2
11. USB 2.0 x 4
12. eSATA x 2
13. VGA output
14. HDMI output
15. DI/DO (4 in 2 out)

    
    Top to bottom: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO-1, DO-2

16. Reset button*
17. Power connector
18. K-lock security slot

1.1.13 DS-4200-RM Pro+ Series

DS-4209-RM Pro+/ DS-4212-RM Pro+/ DS-4216-RM Pro+/ DS-4220-RM Pro+/ DS-4225-RM Pro+/ DS-4232-RM Pro+/ DS-4236-RM Pro+/ DS-4242-RM Pro+/ DS-4249-RM Pro+/ DS-4256-RM Pro+/ DS-4264-RM Pro+

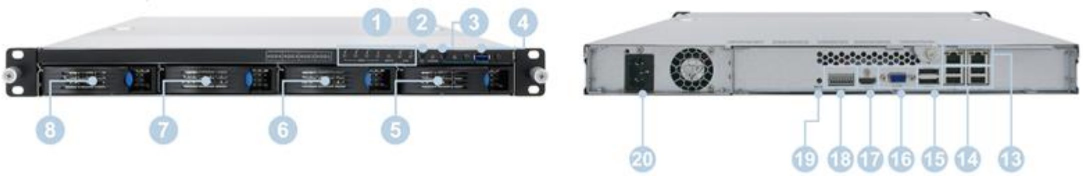
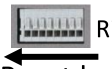


Figure 1-13. Front & Rear View of DS-4200-RM Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. Gigabit LAN x 2
10. USB 2.0 x 4
11. eSATA x 2
12. VGA output
13. HDMI output
14. DI/DO (4 in 2 out)

     Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2
15. Reset button*
16. Power connector

1.1.14 DS-4200-RMP Pro+ Series

DS-4209-RMP Pro+/ DS-4212-RMP Pro+/ DS-4216-RMP Pro+/ DS-4220-RMP Pro+/ DS-4225-RMP Pro+/ DS-4232-RMP Pro+/ DS-4236-RMP Pro+/ DS-4242-RMP Pro+/ DS-4249-RMP Pro+/ DS-4256-RMP Pro+/ DS-4264-RMP Pro+

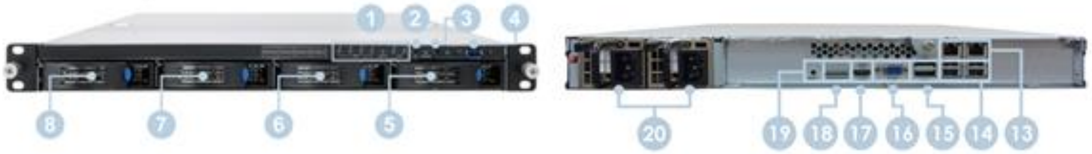
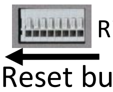


Figure 1-14. Front & Rear View of DS-4200-RMP Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. Gigabit LAN x 2
10. USB 2.0 x 4
11. eSATA x 2
12. VGA output
13. HDMI output
14. DI/DO (4 in 2 out)

     Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2
15. Reset button*
16. Power connector

⚠ **Note:** The redundant power (with two adaptors) will be indicated in green light in the rear panel of DS-4200-RMP Pro+ series. Once one of the adaptors is failed, system buzzer will start beeping and no LED indicator light will display in rear panel. To stop the buzzer, please press the red button in the rear panel of system.

1.1.15 DS-8200-RM Pro+ Series

DS-8209-RM Pro+/ DS-8212-RM Pro+/ DS-8216-RM Pro+/ DS-8220-RM Pro+/
DS-8225-RM Pro+/ DS-8232-RM Pro+/ DS-8236-RM Pro+/ DS-8242-RM Pro+/
DS-8249-RM Pro+/ DS-8256-RM Pro+/ DS-8264-RM Pro+

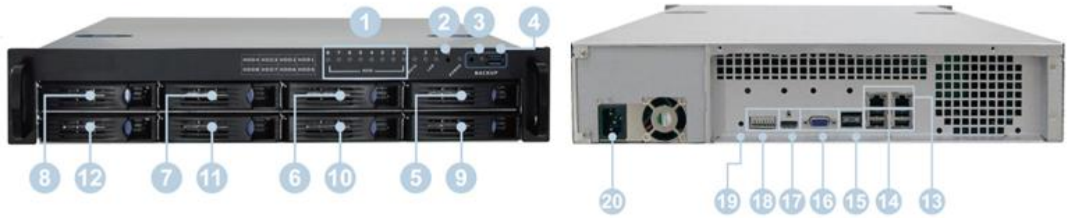


Figure 1-15. Front & Rear View of DS-8200-RM Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)

Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

19. Reset button*
20. Power connector

1.1.16 DS-8200-RMP Pro+ Series

DS-8209-RMP Pro+/ DS-8212-RMP Pro+/ DS-8216-RMP Pro+/ DS-8220-RMP Pro+/ DS-8225-RMP Pro+/ DS-8232-RMP Pro+/ DS-8236-RMP Pro+/ DS-8242-RMP Pro+/ DS-8249-RMP Pro+/ DS-8256-RMP Pro+/ DS-8264-RMP Pro+

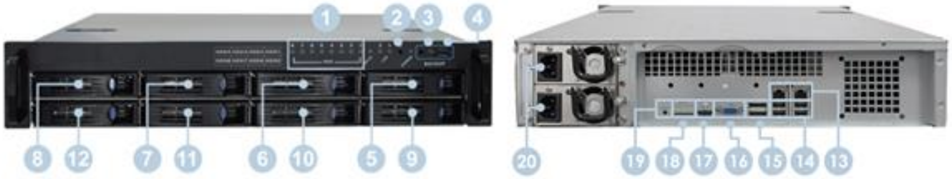


Figure 1-16. Front & Rear View of DS-8200-RMP Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)

    Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2
19. Reset button*
20. Power connector

Note: The redundant power (with two adaptors) will be indicated in green light in the rear panel of DS-8200-RMP Pro+ series. Once one of the adaptors is failed, system buzzer will start beeping and no LED indicator light will display in rear panel. To stop the buzzer, please press the red button in the rear panel of system.

1.1.17 DS-4300 Pro+ Series

DS-4332 Pro+/ DS-4336 Pro+/ DS-4342 Pro+/ DS-4349 Pro+/ DS-4356 Pro+/ DS-4364 Pro+

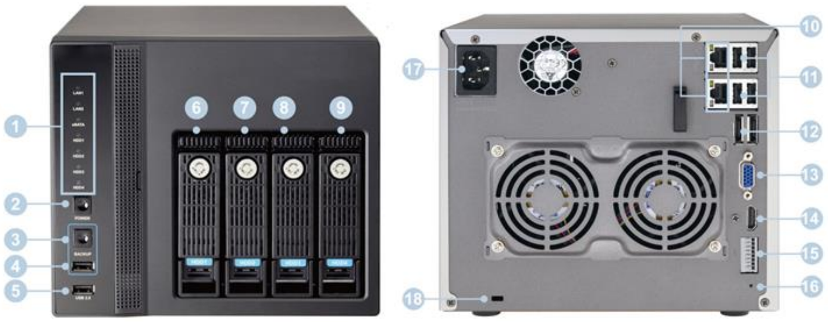
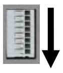


Figure 1-17. Front & Rear View of DS-4300 Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 2.0 x 1(Support auto video backup)
5. USB 2.0 x 1
6. HDD1
7. HDD2
8. HDD3
9. HDD4
10. Gigabit LAN x 2
11. USB 2.0 x 4
12. eSATA x 2
13. VGA output
14. HDMI output
15. DI/DO (4 in 2 out)

     Top to bottom: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO-1, DO-2
16. Reset button*
17. Power connector
18. K-lock security slot

1.1.18 DS-4300-RM Pro+ Series

DS-4332-RM Pro+/ DS-4336-RM Pro+/ DS-4342-RM Pro+/ DS-4349-RM Pro+/ DS-4356-RM Pro+/ DS-4364-RM Pro+

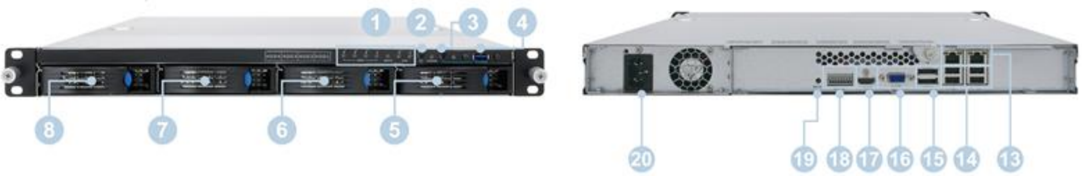
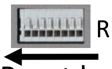


Figure 1-18. Front & Rear View of DS-4300-RM Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. Gigabit LAN x 2
10. USB 2.0 x 4
11. eSATA x 2
12. VGA output
13. HDMI output
14. DI/DO (4 in 2 out)

     Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2
15. Reset button*
16. Power connector

1.1.19 DS-4300-RMP Pro+ Series

DS-4332-RMP Pro+/ DS-4336-RMP Pro+/ DS-4342-RMP Pro+/ DS-4349-RMP Pro+/ DS-4356-RMP Pro+/ DS-4364-RMP Pro+

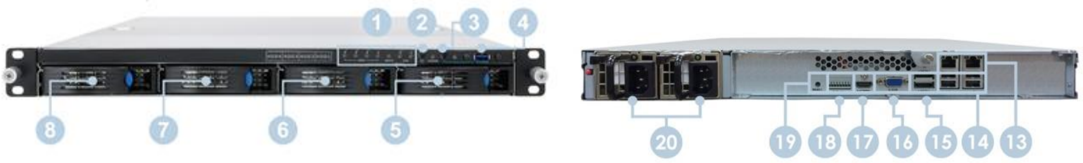
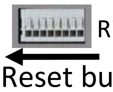


Figure 1-19. Front & Rear View of DS-4300-RMP Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. Gigabit LAN x 2
10. USB 2.0 x 4
11. eSATA x 2
12. VGA output
13. HDMI output
14. DI/DO (4 in 2 out)

 Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

15. Reset button*
16. Power connector

Note: The redundant power (with two adaptors) will be indicated in green light in the rear panel of DS-4300-RMP Pro+ series. Once one of the adaptors is failed, system buzzer will start beeping and no LED indicator light will display in rear panel. To stop the buzzer, please press the red button in the rear panel of system.

1.1.20 DS-8300-RM Pro+ Series

DS-8342-RM Pro+/ DS-8349-RM Pro+/ DS-8356-RM Pro+/ DS-8364-RM Pro+

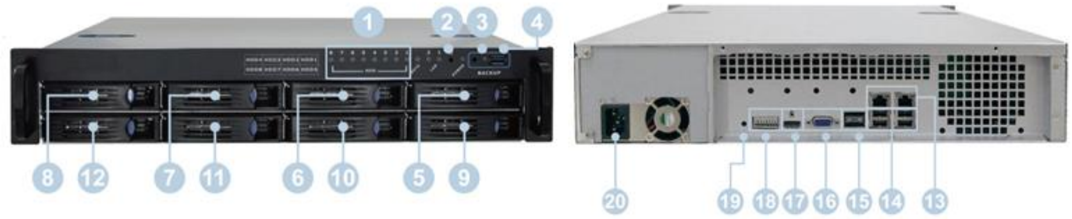


Figure 1-20. Front & Rear View of DS-8300-RM Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)

Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

19. Reset button*
20. Power connector

1.1.21 DS-8300-RMP Pro+ Series

DS-8342-RMP Pro+/ DS-8349-RMP Pro+/ DS-8356-RMP Pro+/ DS-8364-RMP Pro+

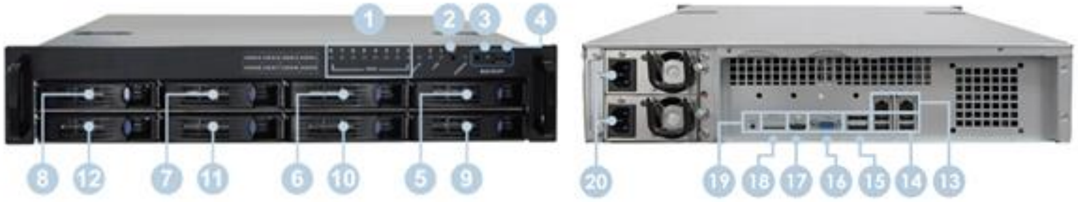


Figure 1-21. Front & Rear View of DS-8300-RMP Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)

Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

19. Reset button*
20. Power connector

⚠ **Note:** The redundant power (with two adaptors) will be indicated in green light in the rear panel of DS-8300-RMP Pro+ series. Once one of the adaptors is failed, system buzzer will start beeping and no LED indicator light will display in rear panel. To stop the buzzer, please press the red button in the rear panel of system.

1.1.22 DS-8400-RM Pro+ Series

DS-8442-RM Pro+/ DS-8449-RM Pro+/ DS-8456-RM Pro+/ DS-8464-RM Pro+

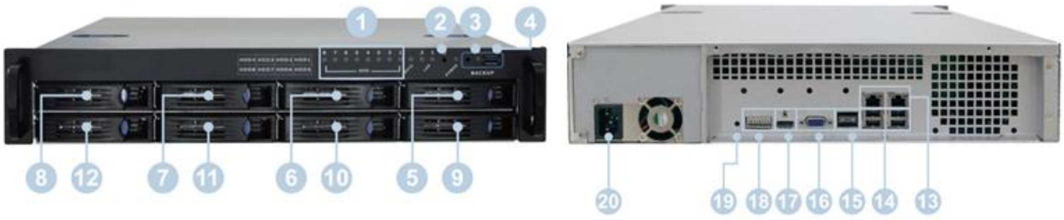


Figure 1-22. Front & Rear View of DS-8400-RM Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1, HDD2, HDD3, HDD4, HDD5, HDD6, HDD7, HDD8
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. Gigabit LAN x 2
14. USB 2.0 x 4
15. eSATA x 2
16. VGA output
17. HDMI output
18. DI/DO (4 in 2 out)

Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

19. Reset button*
20. Power connector

1.1.23 DS-16200-RM Pro+ Series

DS-16216-RM Pro+/ DS-16220-RM Pro+/ DS-16225-RM Pro+/ DS-16232-RM Pro+/ DS-16236-RM Pro+

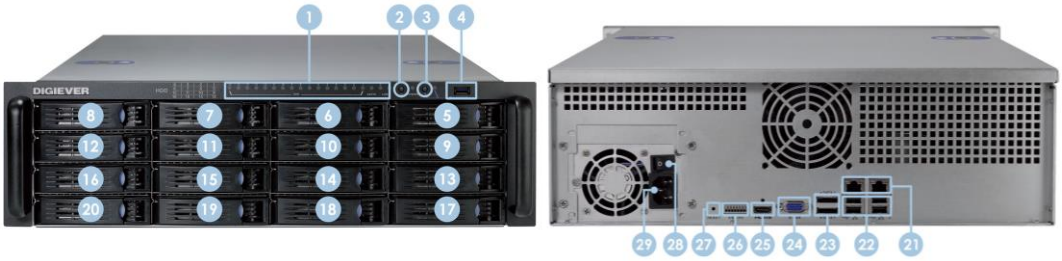

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Figure 1-23. Front & Rear View of DS-16200-RM Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1~16
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. HDD9
14. HDD10
15. HDD11
16. HDD12
17. HDD13
18. HDD14
19. HDD15
20. HDD16
21. Gigabit LAN x 2
22. USB 2.0 x 4
23. eSATA x 2
24. VGA output
25. HDMI output

26. DI/DO (4 in 2 out)

Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

27. Reset button*
28. Power connector

1.1.24 DS-16300-RM Pro+ Series

DS-16316-RM Pro+/ DS-16320-RM Pro+/ DS-16325-RM Pro+/ DS-16332-RM Pro+/ DS-16336-RM Pro+/ DS-16342-RM Pro+/ DS-16349-RM Pro+/ DS-16356-RM Pro+/ DS-16364-RM Pro+

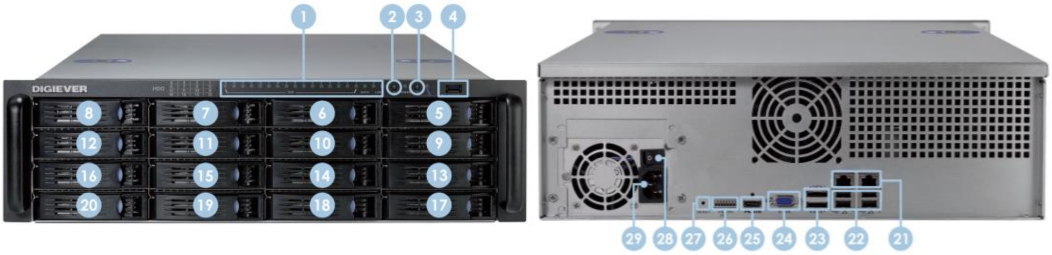
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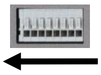
Figure 1-2 ` . Front & Rear View of DS-16300-RM Pro+ Series

1. LED indicators: LAN1, LAN2, eSATA, HDD1~16
2. Power button
3. USB BACKUP button - Auto video backup
4. USB 3.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. HDD9
14. HDD10
15. HDD11
16. HDD12
17. HDD13
18. HDD14
19. HDD15
20. HDD16

21. Gigabit LAN x 2
22. USB 2.0 x 4
23. eSATA x 2
24. VGA output
25. HDMI output
26. DI/DO (4 in 2 out)



Right to left: Vcc5V, GND, DI-1, DI-2, DI-3, DI-4, DO1, DO2

27. Reset button*
28. Power connector

1.2 LED Indicators Status

1.2.1 DS-2000 Series

DS-2005/ DS-2009/ DS-2012/ DS-2016/ DS-2020/ DS-2025/ DS-2032

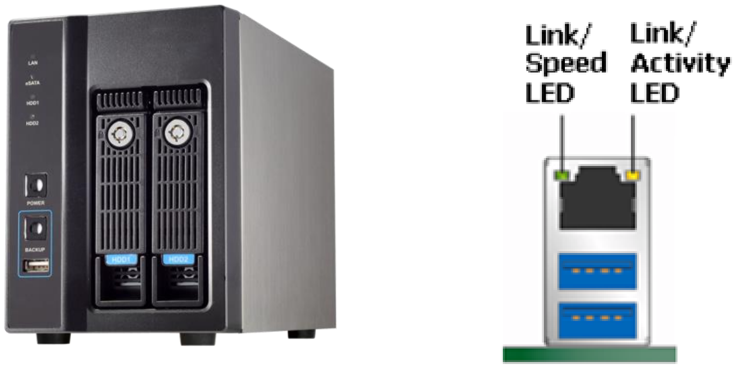


Figure 2-1. DS-2000 Series Front Panel & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Port on Rear Panel

LED	LED Position	LED Status	Indicate
LAN	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow blinking	LAN Activity is occurring
LAN	Speed (Left LED)	Off	10M/100Mbps connection or no connection
		Orange	1000Mbps connection

⚠Note:

**USB BACKUP will beep and process after long pressing BACKUP button for 3 seconds.

**To turn off your NVR, long pressing power button at least 2 seconds.

**To turn on your NVR, long pressing power button at least 3 seconds.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.2 DS-4000 Series

DS-4005/ DS-4009/ DS-4012/ DS-4016/ DS-4020/ DS-4025/ DS-4032

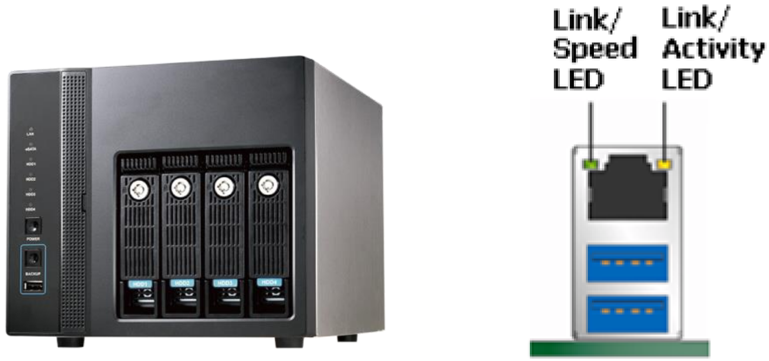


Figure 2-2. DS-4000 Series Front Panel & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Port on Rear Panel

LED	LED Position	LED Status	Indicate
LAN	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow blinking	LAN Activity is occurring
LAN	Speed (Left LED)	Off	10M/100Mbps connection or no connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, users need to press power button at least 2 seconds.
***To turn on NVR, users need to press power button at least 3 seconds.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.3 DS-1100 Pro Series

DS-1105 Pro/ DS-1109 Pro/ DS-1112 Pro/ DS-1116 Pro/ DS-1120 Pro/ DS-1125 Pro/ DS-1132 Pro/ DS-1136 Pro

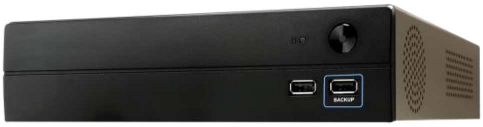
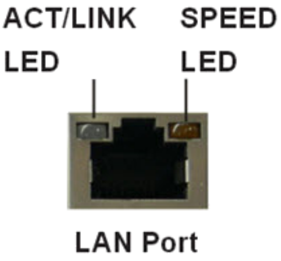


Figure 2-3. DS-1100 Pro Series Front Panel

LAN Port LED Indications

Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Yellow	1Gbps connection



⚠**Note:**

**To turn off your NVR, long pressing power button at least 2 seconds.

**To turn on your NVR, long pressing power button at least 3 seconds.

⚠**Note:** To reset to default, please follow below methods:

Press the power button twice with the interval of one second. In other words, please press the power button in the 1st second and press the power button again in the 2nd second. It will be easier to operate the reset to default with the assistance of watch or clock.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.4 DS-2100 Pro Series

DS-2105 Pro/ DS-2109 Pro/ DS-2112 Pro/ DS-2116 Pro/ DS-2120 Pro/ DS-2125 Pro/ DS-2132 Pro/ DS-2136 Pro

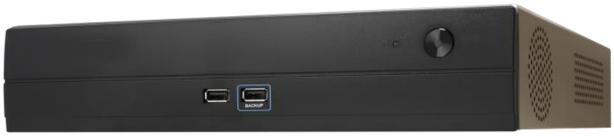
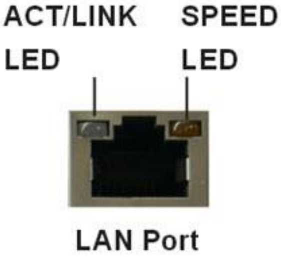


Figure 2-4. DS-2100 Series Front Panel

LAN Port LED Indications			
Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Yellow	1Gbps connection



⚠**Note:**

**To turn off your NVR, long pressing power button at least 2 seconds.

**To turn on your NVR, long pressing power button at least 3 seconds.

⚠**Note:** To reset to default, please follow below methods:

Press the power button twice with the interval of one second. In other words, please press the power button in the 1st second and press the power button again in the 2nd second. It will be easier to operate the reset to default with the assistance of watch or clock.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.5 DS-4200 Pro Series

DS-4205Pro/ DS-4209Pro/ DS-4212Pro/ DS-4216Pro/ DS-4220Pro/ DS-4225Pro/ DS-4232 Pro/ DS-4236 Pro

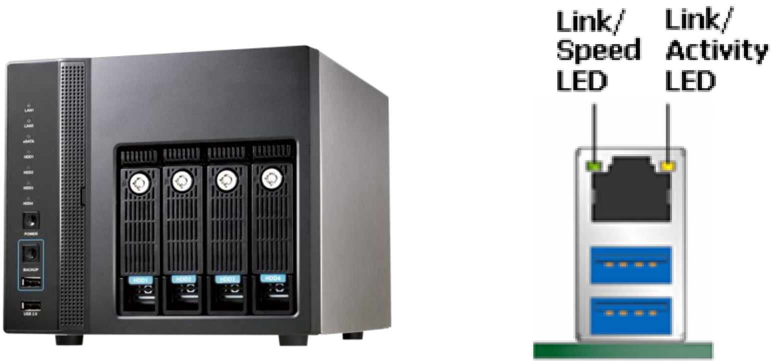


Figure 2-5. DS-4200 Pro Series Front Panel & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.6 DS-4200-RM Pro Series

DS-4209-RM Pro/ DS-4212-RM Pro/ DS-4216-RM Pro/DS-4220-RM Pro/ DS-4225-RM Pro/ DS-4232-RM Pro/ DS-4236-RM Pro

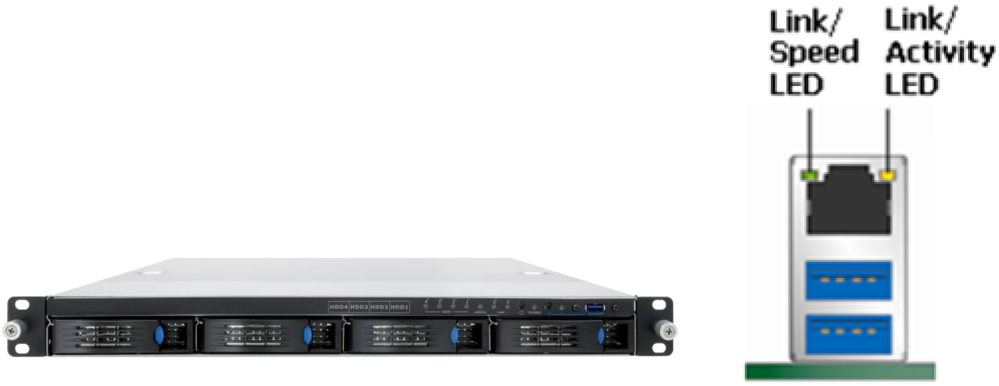


Figure 2-6. Front View of DS-4200-RM Pro Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.

**To turn off NVR, user needs to press power button at least 2 seconds.

*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.7 DS-4200-RMP Pro Series

DS-4209-RMP Pro/ DS-4212-RMP Pro/ DS-4216-RMP Pro/ DS-4220-RMP Pro/
DS-4225-RMP Pro/ DS-4232-RMP Pro/ DS-4236-RMP Pro

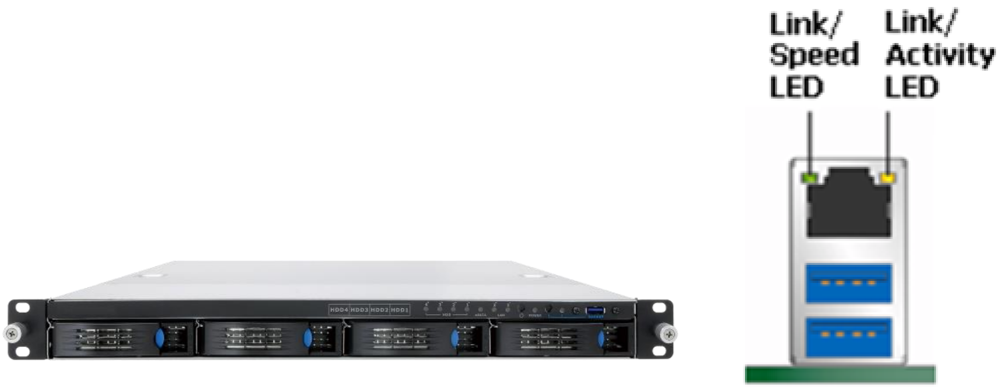


Figure 2-7. Front View of DS-4200-RMP Pro Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.

**To turn off NVR, user needs to press power button at least 2 seconds.

*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.8 DS-8200-RM Pro Series

DS-8209-RM Pro/ DS-8212-RM Pro/ DS-8216-RM Pro/DS-8220-RM Pro/
DS-8225-RM Pro/DS-8232-RM Pro/ DS-82326-RM Pro

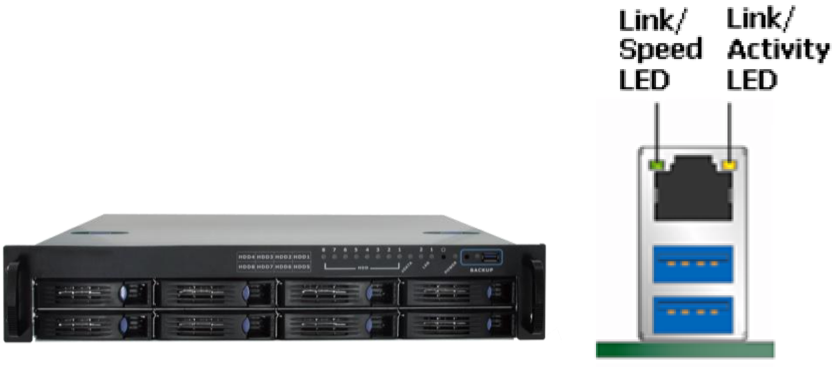


Figure 2-8. Front View of DS-8200-RM Pro Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4 HDD5 HDD6 HDD7 HDD8	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.

**To turn off NVR, user needs to press power button at least 2 seconds.

*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.9 DS-8200-RMP Pro Series

DS-8209-RMP Pro/ DS-8212-RMP Pro/ DS-8216-RMP Pro/DS-8220-RMP Pro/ DS-8225-RMP Pro/DS-8232-RMP Pro/ DS-82326-RMP Pro

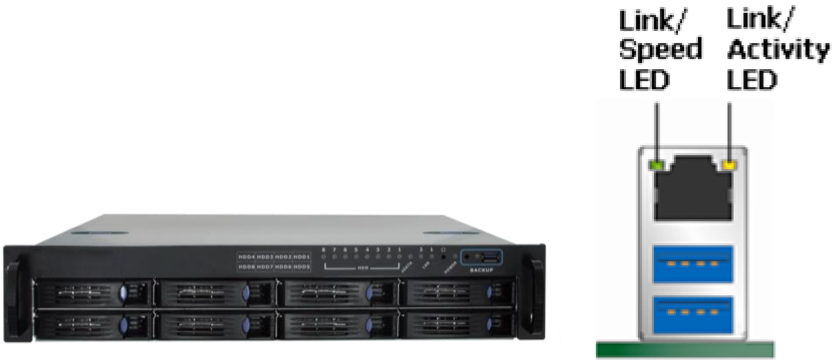


Figure 2-9. Front View of DS-8200-RMP Pro Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4 HDD5 HDD6 HDD7 HDD8	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.10 DS-1100 Pro+ Series

DS-1105 Pro+/ DS-1109 Pro+/ DS-1112 Pro+/ DS-1116 Pro+/ DS-1120 Pro+/ DS-1125 Pro+/ DS-1132 Pro+/ DS-1136 Pro+/ DS-1142 Pro+/ DS-1149 Pro+/ DS-1156 Pro+/ DS-1164 Pro+

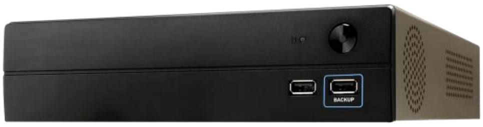
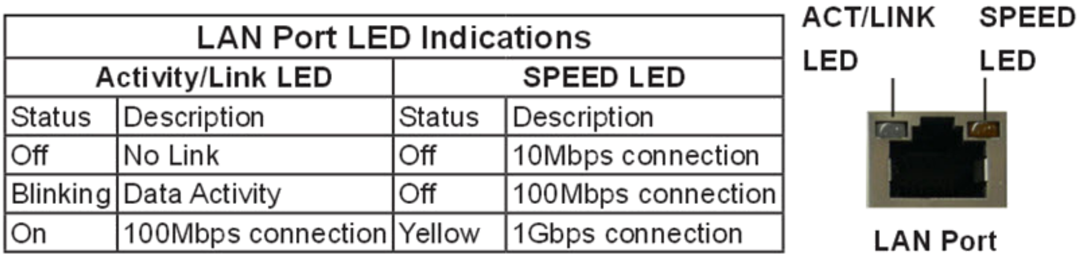


Figure 2-10. DS-1100 Pro+ Series Front Panel



LAN Port LED Indications			
Activity/Link LED		**SPEED LED**	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Yellow	1Gbps connection

ACT/LINK LED
SPEED LED
LAN Port

Note:
**To turn off your NVR, long pressing power button at least 2 seconds.
**To turn on your NVR, long pressing power button at least 3 seconds.

Note: To reset to default, please follow below methods:
Press the power button twice with the interval of one second. In other words, please press the power button in the 1st second and press the power button again in the 2nd second. It will be easier to operate the reset to default with the assistance of watch or clock.

Note: Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.11 DS-2100 Pro+ Series

DS-2105 Pro+/ DS-2109 Pro+/ DS-2112 Pro+/ DS-2116 Pro+/ DS-2120 Pro+/ DS-2125 Pro+/ DS-2132 Pro+/ DS-2136 Pro+/ DS-2142 Pro+/ DS-2149 Pro+/ DS-2156 Pro+/ DS-2164 Pro+

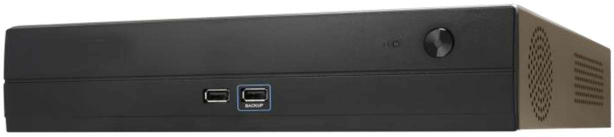
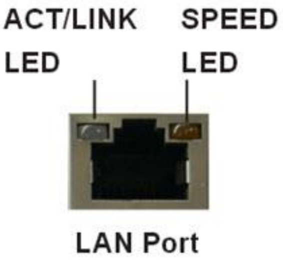


Figure 2-11. DS-2100 Pro+ Series Front Panel

LAN Port LED Indications			
Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Yellow	1Gbps connection



Note:
**To turn off your NVR, long pressing power button at least 2 seconds.
**To turn on your NVR, long pressing power button at least 3 seconds.

Note: To reset to default, please follow below methods:
Press the power button twice with the interval of one second. In other words, please press the power button in the 1st second and press the power button again in the 2nd second. It will be easier to operate the reset to default with the assistance of watch or clock.

Note: Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.12 DS-4200 Pro+ Series

DS-4205 Pro+/ DS-4209 Pro+/ DS-4212 Pro+/ DS-4216 Pro+/ DS-4220 Pro+/ DS-4225 Pro+/ DS-4232 Pro+/ DS-4236 Pro+/ DS-4242 Pro+/ DS-4249 Pro+/ DS-4256 Pro+/ DS-4264 Pro+

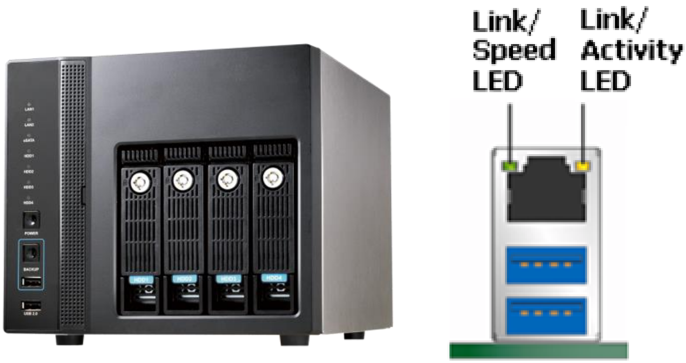


Figure 2-12. DS-4200 Pro+ Series Front Panel & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.13 DS-4200-RM Pro+ Series

DS-4209-RM Pro+/ DS-4212-RM Pro+/ DS-4216-RM Pro+/ DS-4220-RM Pro+/ DS-4225-RM Pro+/ DS-4232-RM Pro+/ DS-4236-RM Pro+/ DS-4242-RM Pro+/ DS-4249-RM Pro+/ DS-4256-RM Pro+/ DS-4264-RM Pro+

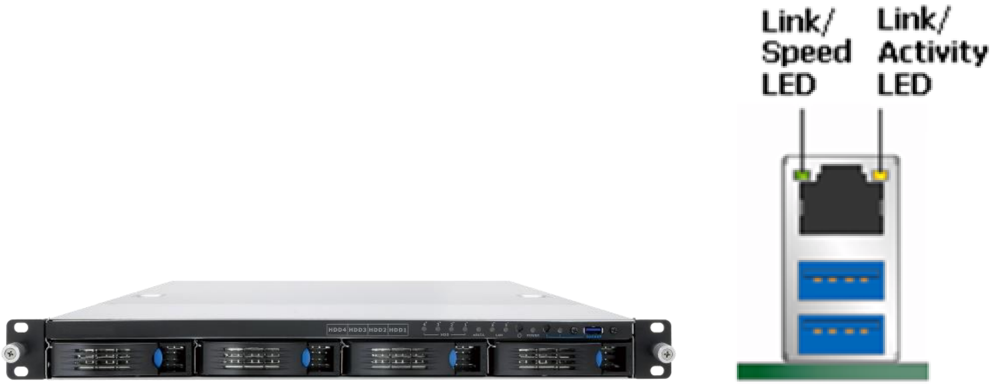


Figure 2-13. Front View of DS-4200-RM Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.14 DS-4200-RMP Pro+ Series

DS-4209-RMP Pro+/ DS-4212-RMP Pro+/ DS-4216-RMP Pro+/ DS-4220-RMP Pro+/ DS-4225-RMP Pro+/ DS-4232-RMP Pro+/ DS-4236-RMP Pro+/ DS-4242-RMP Pro+/ DS-4249-RMP Pro+/ DS-4256-RMP Pro+/ DS-4264-RMP Pro+

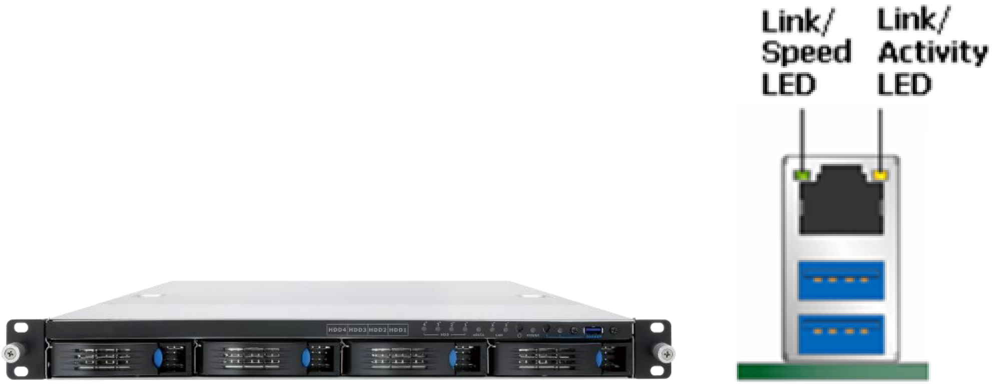


Figure 2-14. Front View of DS-4200-RMP Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.15 DS-8200-RM Pro+ Series

DS-8209-RM Pro+/ DS-8212-RM Pro+/ DS-8216-RM Pro+/ DS-8220-RM Pro+/
DS-8225-RM Pro+/ DS-8232-RM Pro+/ DS-8236-RM Pro+/ DS-8242-RM Pro+/
DS-8249-RM Pro+/ DS-8256-RM Pro+/ DS-8264-RM Pro+

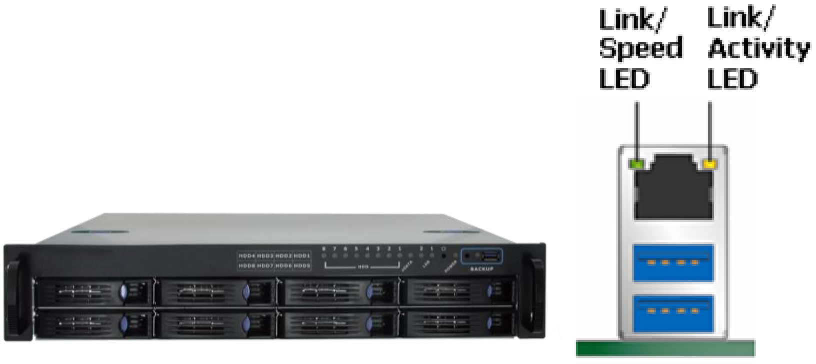


Figure 2-15. Front View of DS-8200-RM Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4 HDD5 HDD6 HDD7 HDD8	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.

**To turn off NVR, user needs to press power button at least 2 seconds.

*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.16 DS-8200-RM Pro+ Series

DS-8209-RMP Pro+/ DS-8212-RMP Pro+/ DS-8216-RMP Pro+/ DS-8220-RMP Pro+/ DS-8225-RMP Pro+/ DS-8232-RMP Pro+/ DS-8236-RMP Pro+/ DS-8242-RMP Pro+/ DS-8249-RMP Pro+/ DS-8256-RMP Pro+/ DS-8264-RMP Pro+

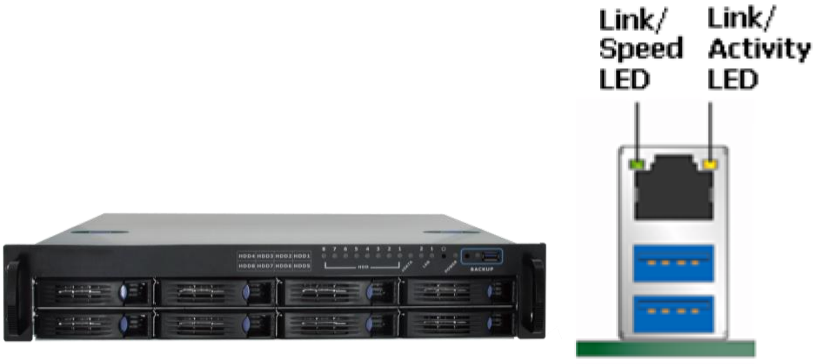


Figure 2-16. Front View of DS-8200-RMP Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4 HDD5 HDD6 HDD7 HDD8	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.17 DS-4300 Pro+ Series

DS-4332 Pro+/ DS-4336 Pro+/ DS-4342 Pro+/ DS-4349 Pro+/ DS-4356 Pro+/ DS-4364 Pro+

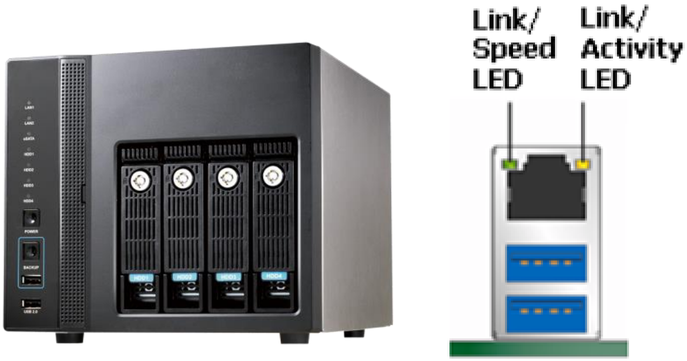


Figure 2-17. DS-4300 Pro+ Series Front Panel & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.

**To turn off NVR, user needs to press power button at least 2 seconds.

Note: Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.18 DS-4300-RM Pro+ Series

DS-4332-RM Pro+/ DS-4336-RM Pro+/ DS-4342-RM Pro+/ DS-4349-RM Pro+/
DS-4356-RM Pro+/ DS-4364-RM Pro+

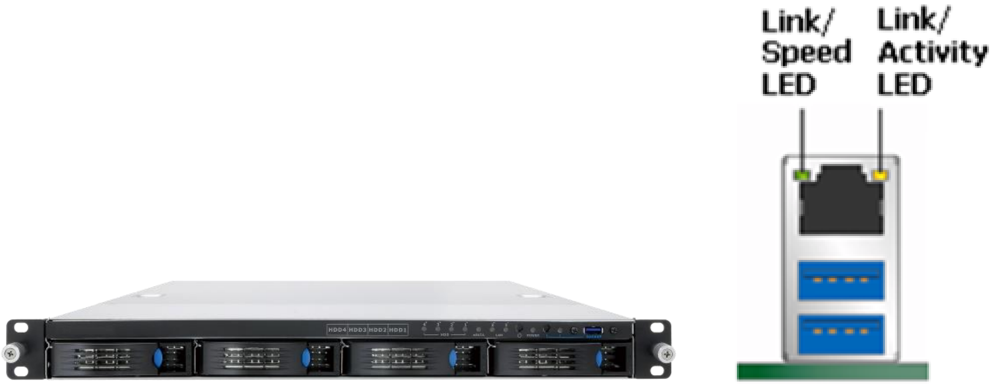


Figure 2-18. Front View of DS-4300-RM Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.19 DS-4300-RMP Pro+ Series

DS-4332-RMP Pro+/ DS-4336-RMP Pro+/ DS-4342-RMP Pro+/ DS-4349-RMP Pro+/ DS-4356-RMP Pro+/ DS-4364-RMP Pro+

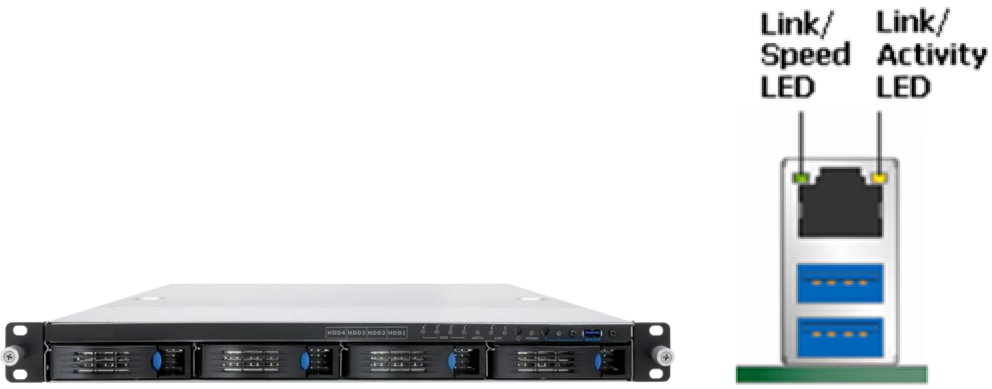


Figure 2-19. Front View of DS-4300-RMP Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.20 DS-8300-RM Pro+ Series

DS-8342-RM Pro+/ DS-8349-RM Pro+/ DS-8356-RM Pro+/ DS-8364-RM Pro+

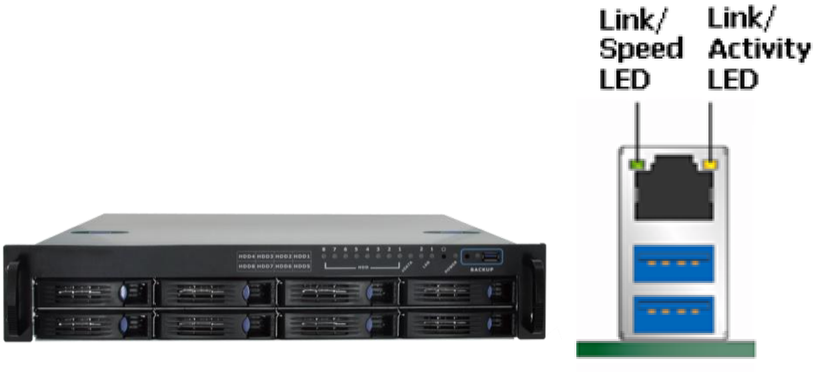


Figure 2-20. Front View of DS-8300-RM Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4 HDD5 HDD6 HDD7 HDD8	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.21 DS-8300-RMP Pro+ Series

DS-8342-RMP Pro+/ DS-8349-RMP Pro+/ DS-8356-RMP Pro+/ DS-8364-RMP Pro+

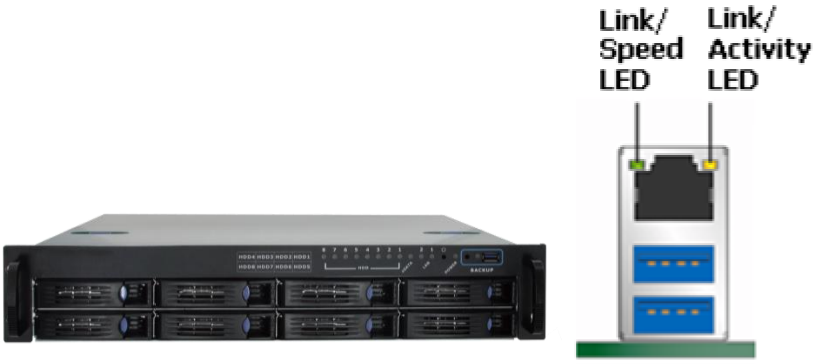


Figure 2-21. Front View of DS-8300-RMP Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4 HDD5 HDD6 HDD7 HDD8	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.22 DS-8400-RM Pro+ Series

DS-8442-RM Pro+/ DS-8449-RM Pro+/ DS-8456-RM Pro+/ DS-8464-RM Pro+

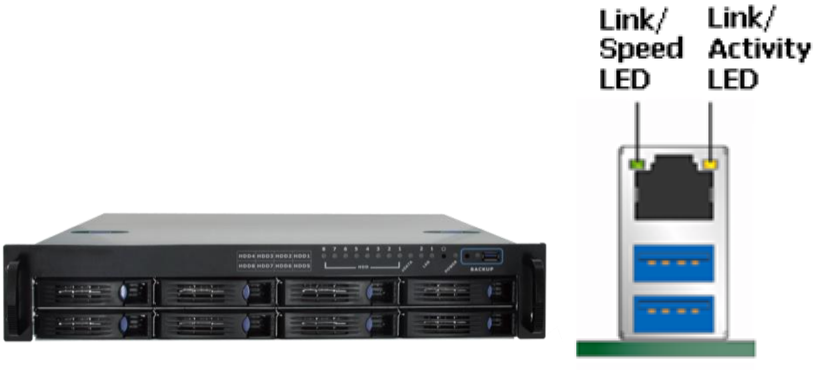


Figure 2-22. Front View of DS-8400-RM Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 HDD2 HDD3 HDD4 HDD5 HDD6 HDD7 HDD8	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.23 DS-16200-RM Pro+ Series

DS-16216-RM Pro+/ DS-16220-RM Pro+/ DS-16225-RM Pro+/ DS-16232-RM Pro+/ DS-16236-RM Pro+

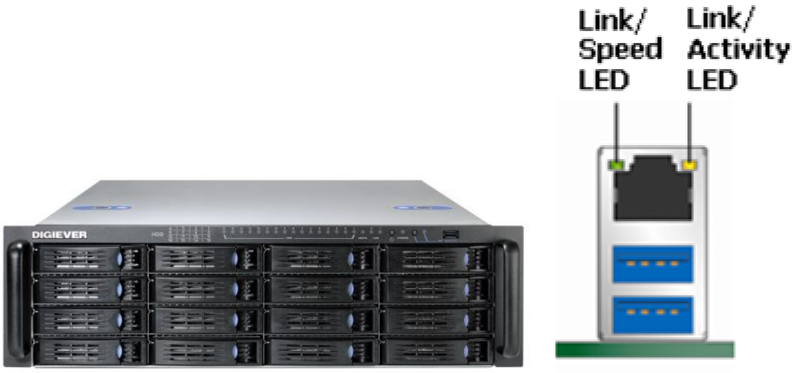


Figure 2-23. Front View of DS-16200-RM Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 to HDD16	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.2.24 DS-16300-RM Pro+ Series

DS-16316-RM Pro+/ DS-16320-RM Pro+/ DS-16325-RM Pro+/ DS-16332-RM Pro+/ DS-16336-RM Pro+/ DS-16342-RM Pro+/ DS-16349-RM Pro+/ DS-16356-RM Pro+/ DS-16364-RM Pro+

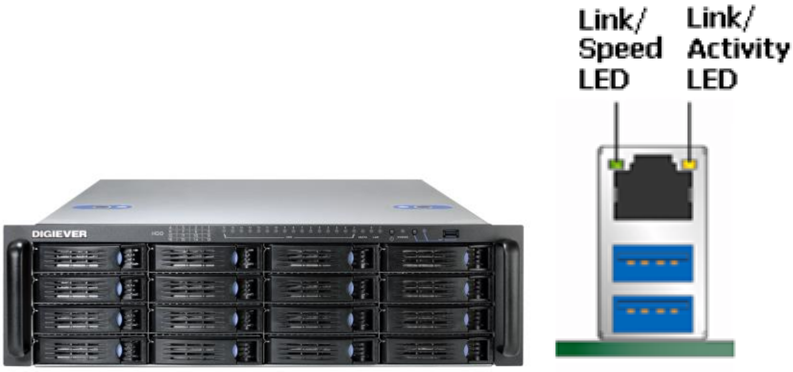


Figure 2-24. Front View of DS-16300-RM Pro+ Series & RJ-45 Port

LED on Front Panel

LED	LED Color & Status	Indicate
LAN	Off	LAN Link is not established
	Orange	LAN Link is established
	Orange blinking	LAN is being accessed
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1 to HDD16	Off	Hard disk drive device is not established
	Green	Hard disk drive is ready to be accessed
	Green blinking	Hard disk drive data is being accessed
	Red	Hard disk drive failure and need to be removed
Power	Off	Power Off
	Green	Power On
BACKUP	Off	USB device is not detected
	Blue	USB device is ready
	Blue blinking	NVR data is being copied to the USB device (Blinking with 1Hz)
	Red	Backup error occurs

LED on RJ-45 Connection at Rear Panel

LED	LED Position	LED/State	Indicate
LAN1 LAN2	Link/Activity (Right LED)	Off	LAN Link is not established
		Yellow	LAN Link is established
		Yellow Blinking	LAN activity is occurring
LAN1 LAN2	Speed (Left LED)	Off	10Mbps connection or no connection
		Green	100Mbps connection
		Orange	1000Mbps connection

*USB BACKUP will start and beep after 3 seconds user presses BACKUP button.
**To turn off NVR, user needs to press power button at least 2 seconds.
*** The LED in the HDD trays are reserved.

⚠ **Note:** Once users press reset button, configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail Setting**s, and **Server Settings** will reset to default. It is advised to backup system configurations. For more information, refer to detail information in user manual 5.6.3 Save/Load Configuration.

1.3 Dual Display Solution: HDMI/VGA/DVI-I Connection

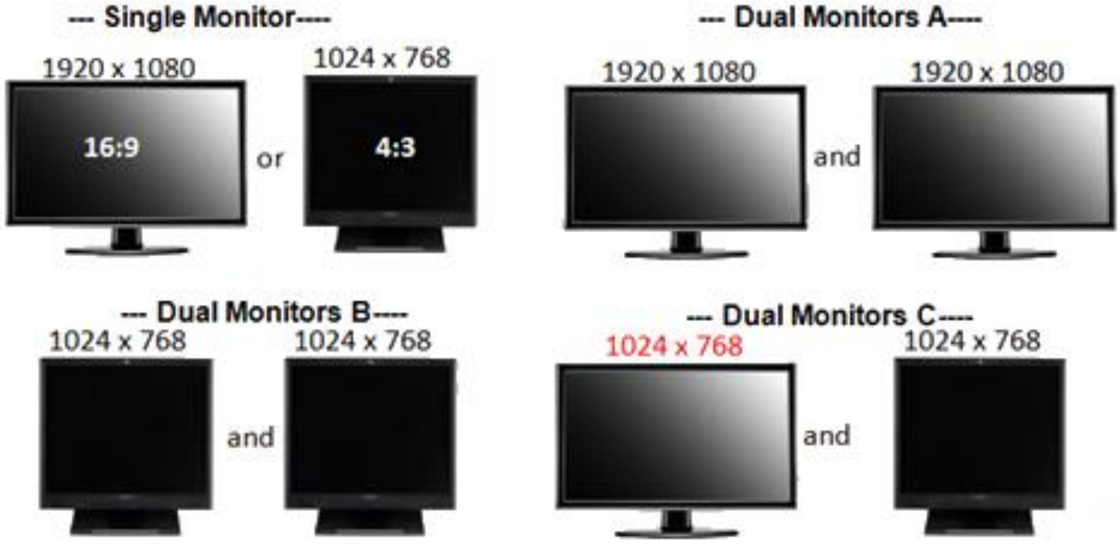
DS-4200 Pro, DS-4200-RM Pro, DS-4200-RMP Pro, DS-8200-RM Pro, DS-8200-RMP Pro, DS-4200 Pro+, DS-4200-RM Pro+, DS-4200-RMP Pro+, DS-8200-RM Pro+, DS-8200-RMP Pro+, DS-4300 Pro+, DS-4300-RM Pro+, DS-4300-RMP Pro+, DS-8300-RM Pro+, **DS-8300-RMP Pro+** and **DS-8400-RM Pro+ Series** provide HDMI and VGA port for local display. Users can connect both of HDMI and VGA at the same time for video output.

DS-1100 Pro Series, DS-2100 Pro Series, DS-1100 Pro+ Series and **DS-2100 Pro+ Series** provide HDMI and DVI-I port for local display. Users can connect both of HDMI and DVI-I at the same time for video output.

Scenario A: If both monitors are Full HD(1920x1080),those will be shown as Full HD.

Scenario B: If both monitors are VGA (1024x768), those will be shown all as VGA.

Scenario C: If one of monitors is 1920x1080 and another is 1024x768, both monitors are set as 1024x768


--- Single Monitor----
1920 x 1080
16:9
or
1024 x 768
4:3
--- Dual Monitors A----
1920 x 1080
and
1920 x 1080
--- Dual Monitors B----
1024 x 768
and
1024 x 768
--- Dual Monitors C----
1024 x 768
and
1024 x 768

Chapter 2. NVR Installation

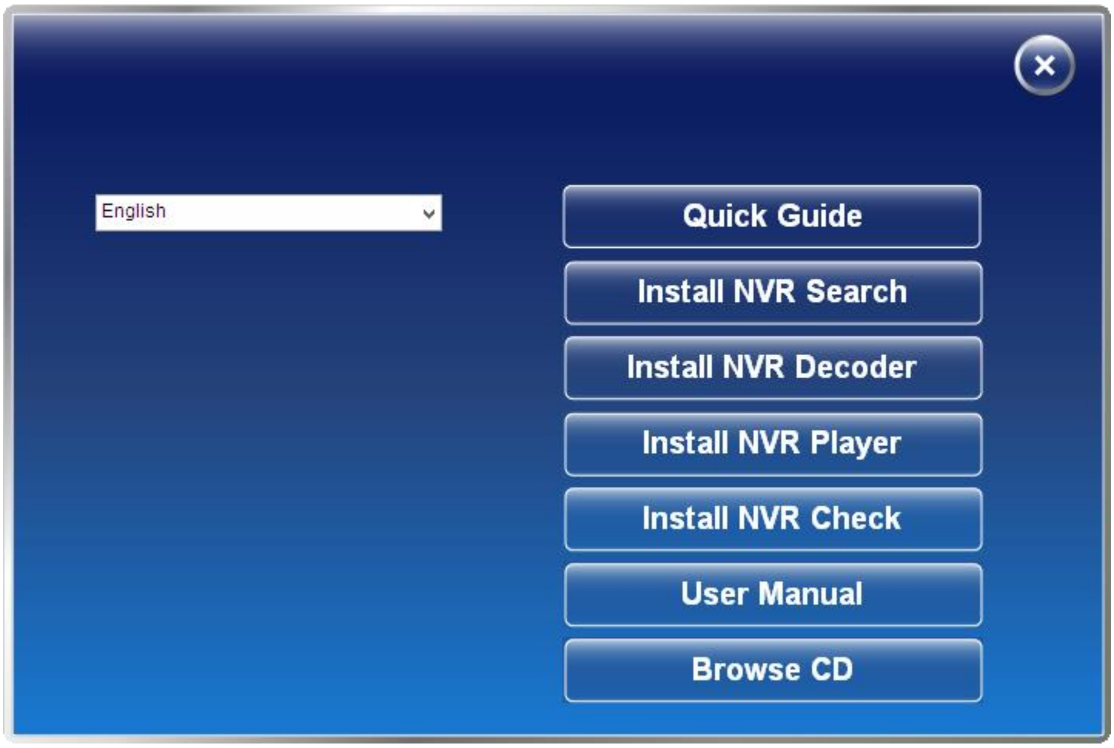
2.1 Remote Web Browser PC System Requirements

The following information is the minimum required specification for remote Windows PC, which users can open a remote browser from the PC to access the Linux NVR server on the network.

- **Operating System**
  Microsoft® Windows® Vista /7 / 8 (32-bit and 64-bit)
- **Browsers in Windows OS (32-bit)**
  Microsoft® Internet Explorer 8.0 or above, Firefox 25 or above, Opera 17.0 or above, Safari5.1.7 or above
- **CPU**
  For channels under 16 : Intel® Dual core CPU 3.0 GHz or above.
  For channels over 16 : Intel® i5/i7 CPU 3.3 GHz or above.
- **Network**
  Minimum 10/100 Ethernet (Gigabit Ethernet is recommended)
  ⚠**Note**: * User is suggested to connect cameras and NVR with Gigabit switch.
- **Memory**
  For channels under 16: DDR3 4G or above.
  For channels over 16: DDR3 8G or above
- **Graphics Adapter**
  AGP or PCI-Express, minimum 1024×768, 16 bit colors, 1G memory or above
  ⚠**Note**: It is highly recommended to use a graphics adaptor which provides higher than resolutions 1024 x 768 in order to experience the full benefits of the software.
  - Make sure the display DPI setting is set to default at 96DPI
  - To set DPI value, right-click on desktop, choose “**Settings**” tab >> “**Advanced**” >> “**General**.”
- **CD-ROM Drive**
  It is necessary to read the operating instructions in the provided CD-ROM.
- **Adobe Reader**
  It is necessary to read the operating instructions in the provided CD-ROM. The audio function will not work if a sound card is not installed in the PC.
  ⚠**Note**: Audio may be interrupted depending on network traffic.

2.2 Connect to NVR

To begin, please insert the product CD-ROM in a PC to access the Quick Guide, User Manual and install the utilities. As user runs the product CD, the following menu is displayed.

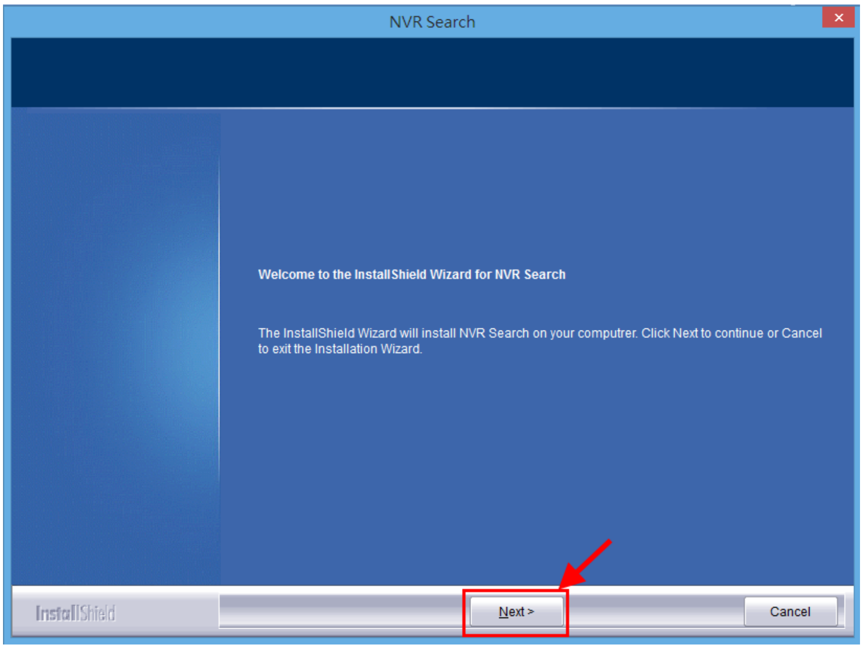

English
Quick Guide
Install NVR Search
Install NVR Decoder
Install NVR Player
Install NVR Check
User Manual
Browse CD

2.2.1 Quick Guide

Click “**Quick Guide**” Quick Guide to enter the folder and double click the file to open. Please read Quick Guide to quickly understand the process of NVR installation.

2.2.2 Install NVR Search

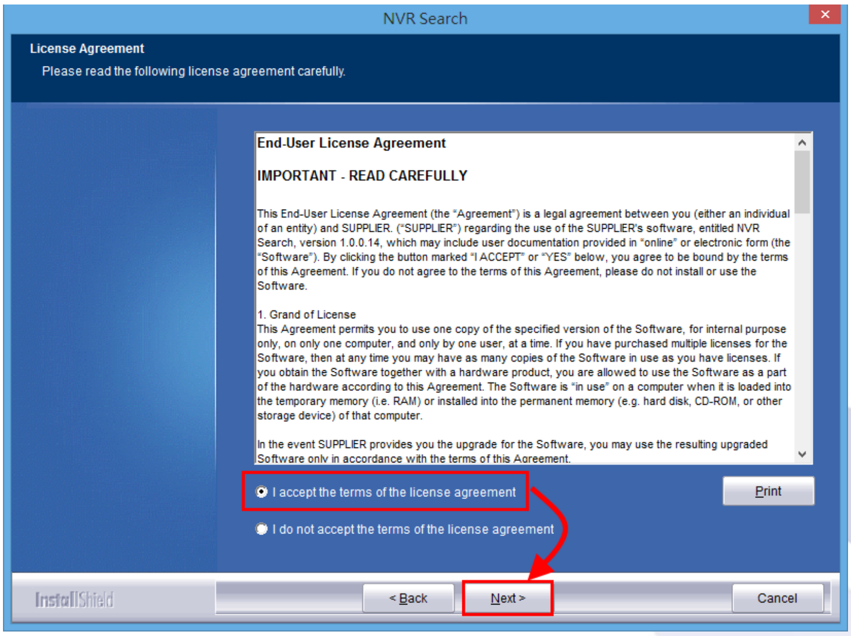
Click “**Install EZ Search**” Install EZ Search to find NVR in the network. Please follow the instructions to install and EZ Search will run automatically.



Welcome to the InstallShield Wizard for NVR Search

The InstallShield Wizard will install NVR Search on your computrer. Click Next to continue or Cancel to exit the Installation Wizard.

When installing NVR Search, **Shield Wizard window for NVR Search** will pop up. Click "**Next**" to continue installation.



License Agreement

Please read the following license agreement carefully.

End-User License Agreement

IMPORTANT - READ CAREFULLY

This End-User License Agreement (the "Agreement") is a legal agreement between you (either an individual of an entity) and SUPPLIER. ("SUPPLIER") regarding the use of the SUPPLIER's software, entitled NVR Search, version 1.0.0.14, which may include user documentation provided in "online" or electronic form (the "Software"). By clicking the button marked "I ACCEPT" or "YES" below, you agree to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, please do not install or use the Software.

1. Grand of License

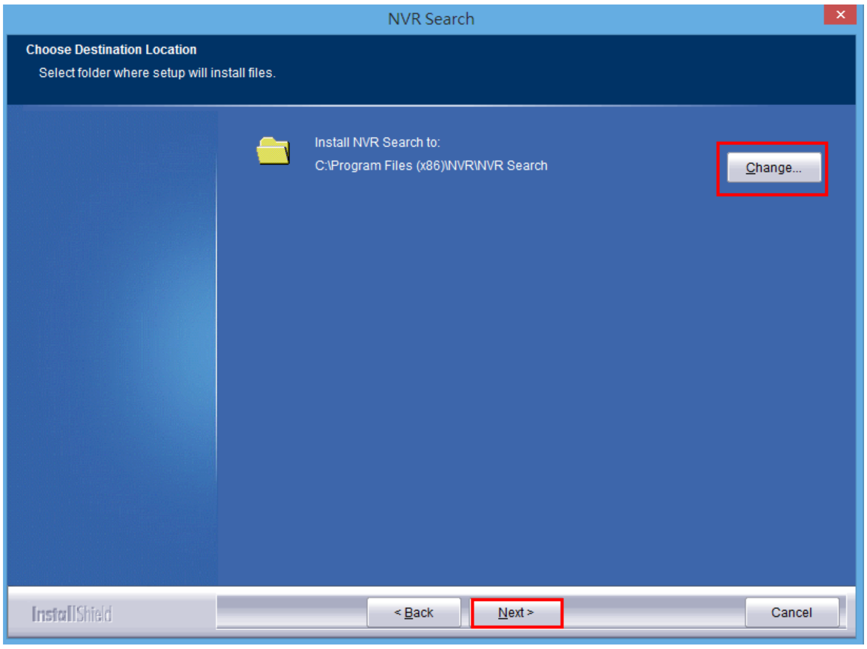
This Agreement permits you to use one copy of the specified version of the Software, for internal purpose only, on only one computer, and only by one user, at a time. If you have purchased multiple licenses for the Software, then at any time you may have as many copies of the Software in use as you have licenses. If you obtain the Software together with a hardware product, you are allowed to use the Software as a part of the hardware according to this Agreement. The Software is "in use" on a computer when it is loaded into the temporary memory (i.e. RAM) or installed into the permanent memory (e.g. hard disk, CD-ROM, or other storage device) of that computer.

In the event SUPPLIER provides you the upgrade for the Software, you may use the resulting upgraded Software only in accordance with the terms of this Agreement.

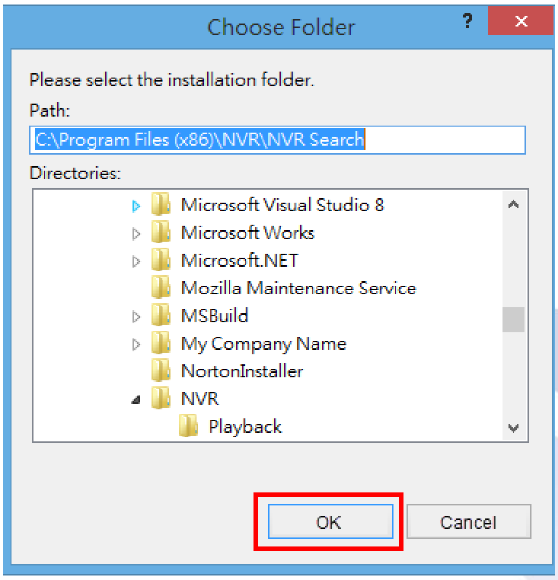
● I accept the terms of the license agreement

○ I do not accept the terms of the license agreement

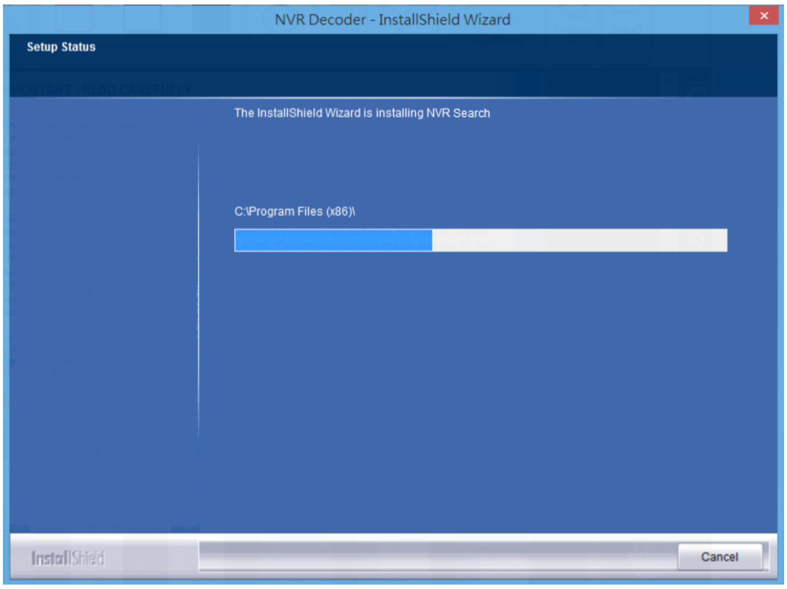
Read the license agreement and click "**I accept the terms of the license agreement**". Click "**Next**" to continue installation.


NVR Search
Choose Destination Location
Select folder where setup will install files.
Install NVR Search to:
C:\Program Files (x86)\NVR\NVR Search
Change...
InstallShield
< Back
Next >
Cancel

Select a location of destination and select a folder where the setup can install files. The default location is: **C:\Program Files (x86)\NVR\NVR Search.** Users can also install NVR Search in other folder by clicking "**Change**" and select a location as below. Click "**OK**" to save the setting.


Choose Folder
?
Please select the installation folder.
Path:
C:\Program Files (x86)\NVR\NVR Search
Directories:
Microsoft Visual Studio 8
Microsoft Works
Microsoft.NET
Mozilla Maintenance Service
MSBuild
My Company Name
NortonInstaller
NVR
Playback
OK
Cancel

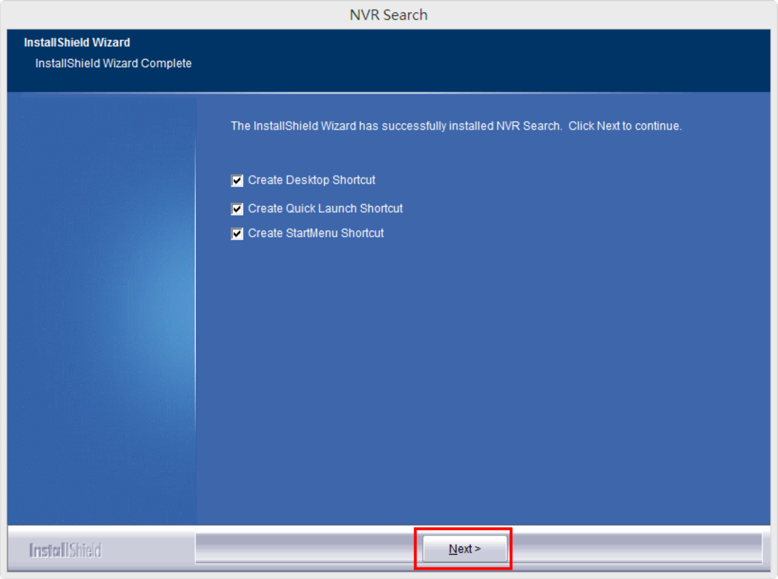
Once a folder is selected, please click "**OK**" to continue installation.


NVR Decoder - InstallShield Wizard
Setup Status
InstallShield
Cancel

The InstallShield Wizard is installing NVR Search

C:\Program Files (x86)\

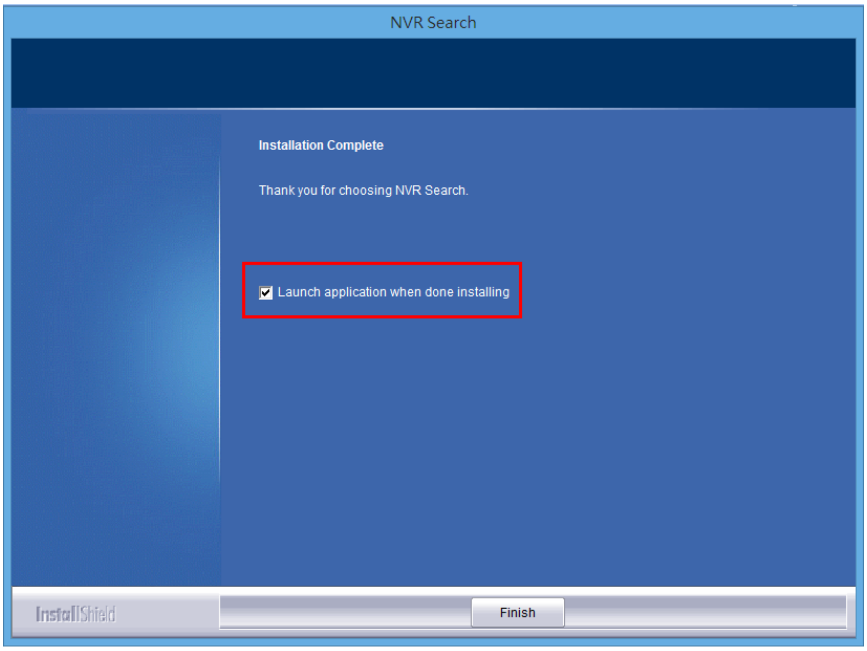
The window shows that the InstallShield Wizard is installing NVR Search. Please wait until the Wizard completes the installation.


NVR Search
InstallShield Wizard
InstallShield Wizard Complete
InstallShield
Next >

The InstallShield Wizard has successfully installed NVR Search. Click Next to continue.

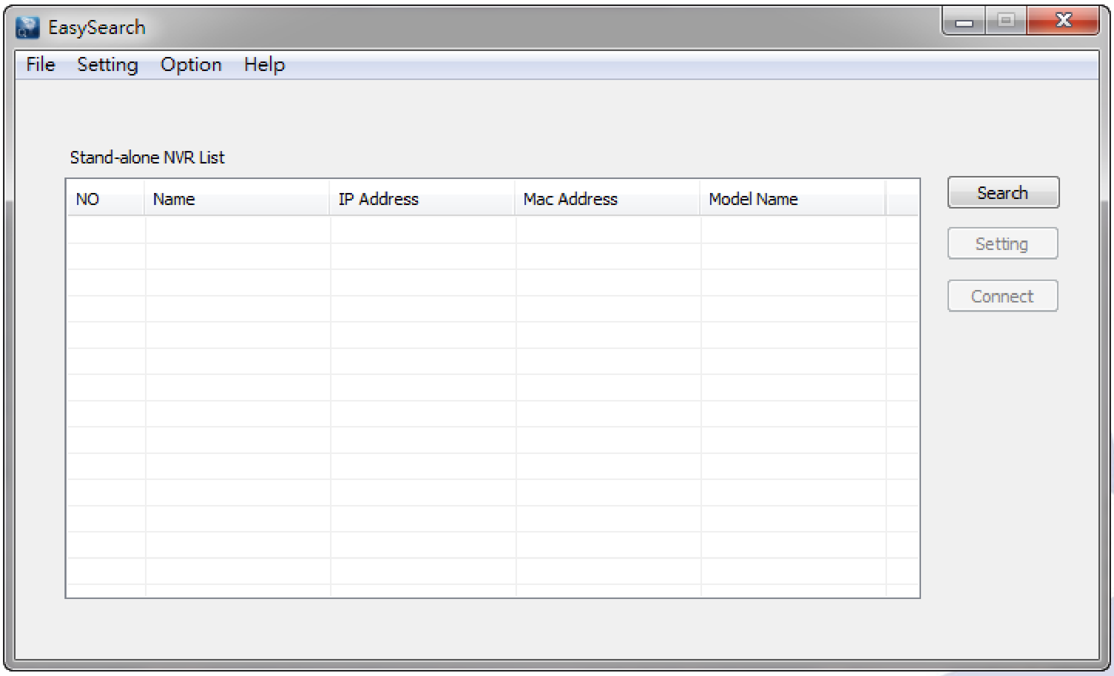
☑ Create Desktop Shortcut
☑ Create Quick Launch Shortcut
☑ Create StartMenu Shortcut

The InstallShield has successfully installed NVR Search. Select “**Create Desktop Shortcut**”/ “**Create Quick Launch Shortcut**”/ “**Create Start Menu Shortcut**” and please click “**Next**” to continue.


NVR Search
Installation Complete
Thank you for choosing NVR Search.
☑ Launch application when done installing
InstallShield
Finish

The installation is complete. Please click “**Launch application when done installing**” to execute NVR Search.

After finishing the setup, the window of NVR Search will pop up.
NVR Search will execute automatically and show **NO.**, **Name, IP Address, Mac Address and Model name** of connected NVR.

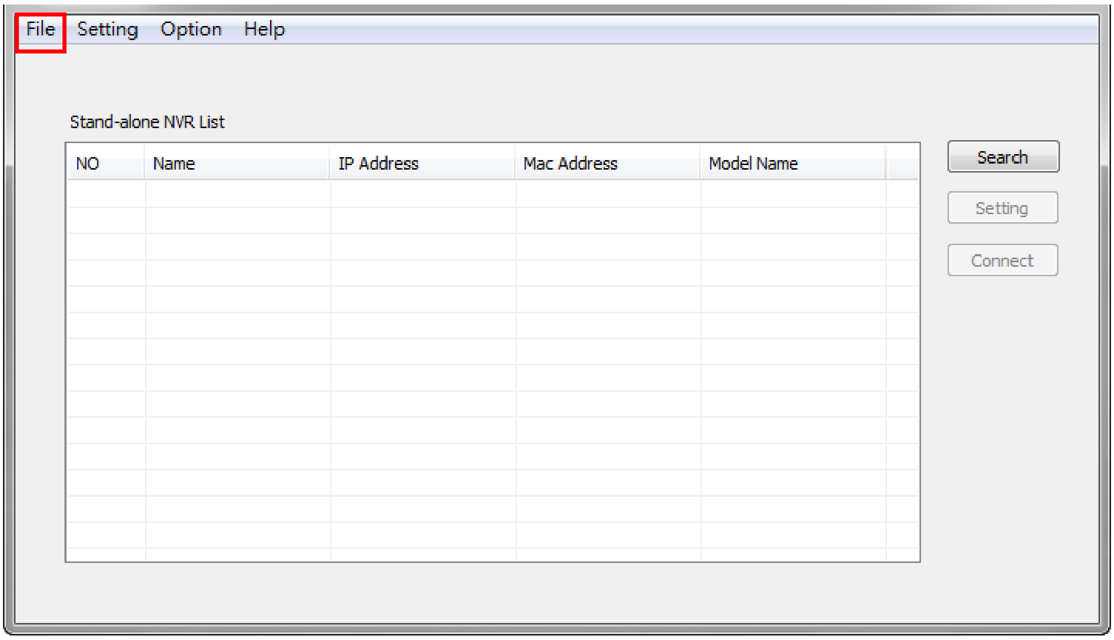

EasySearch
File
Setting
Option
Help
Stand-alone NVR List
NO
Name
IP Address
Mac Address
Model Name
Search
Setting
Connect

Users can click “**Search**” to search NVR.

Introduction of NVR Search

NVR Search provides three kinds of toolbars for users:

1. **File**

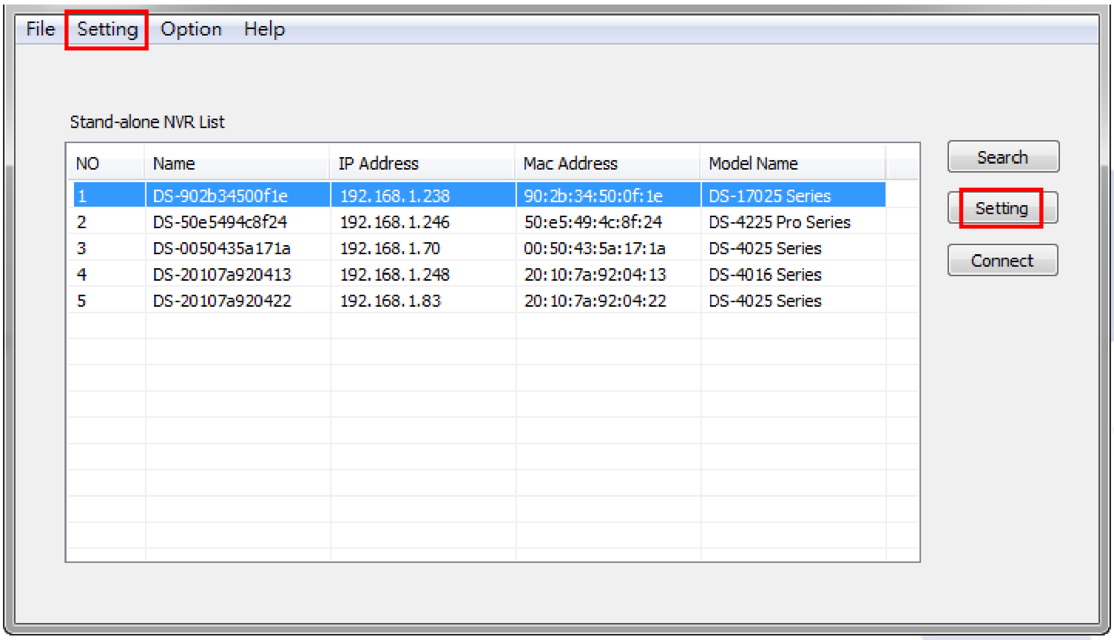

File
Setting
Option
Help
Stand-alone NVR List
Search
Setting
Connect

NO	Name	IP Address	Mac Address	Model Name

You can click “**Exit**” to leave NVR Search and close the window.

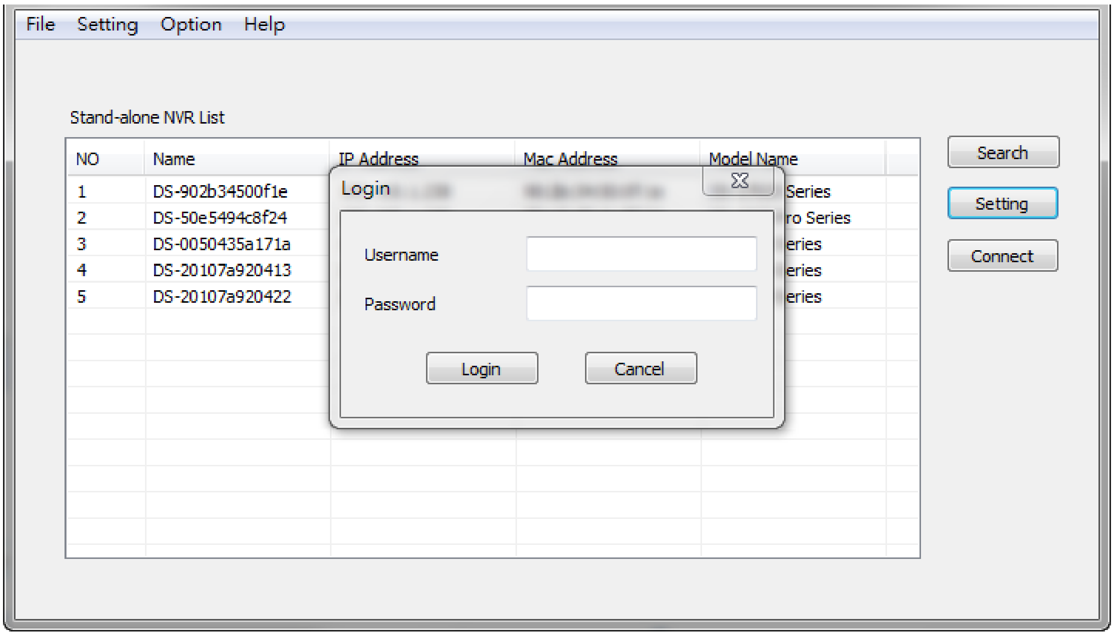
2. **Setting**

Configure UPnP and Network by clicking “**Setting**” in the top left or in the middle right.


File
Setting
Option
Help
Stand-alone NVR List
Search
Setting
Connect

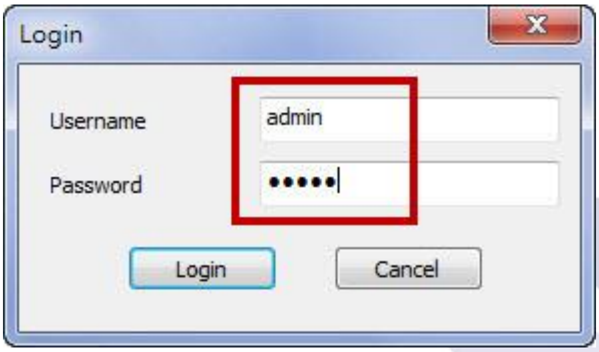
NO	Name	IP Address	Mac Address	Model Name
1	DS-902b34500f1e	192.168.1.238	90:2b:34:50:0f:1e	DS-17025 Series
2	DS-50e5494c8f24	192.168.1.246	50:e5:49:4c:8f:24	DS-4225 Pro Series
3	DS-0050435a171a	192.168.1.70	00:50:43:5a:17:1a	DS-4025 Series
4	DS-20107a920413	192.168.1.248	20:10:7a:92:04:13	DS-4016 Series
5	DS-20107a920422	192.168.1.83	20:10:7a:92:04:22	DS-4025 Series

⚠**Note**: Users will be prompted to enter the login information of NVR before being allowed to change the setting.


File
Setting
Option
Help
Stand-alone NVR List
Search
Setting
Connect
Login
Username
Password
Login
Cancel

NO	Name	IP Address	Mac Address	Model Name
1	DS-902b34500f1e			Series
2	DS-50e5494c8f24			ro Series
3	DS-0050435a171a			eries
4	DS-20107a920413			eries
5	DS-20107a920422			eries

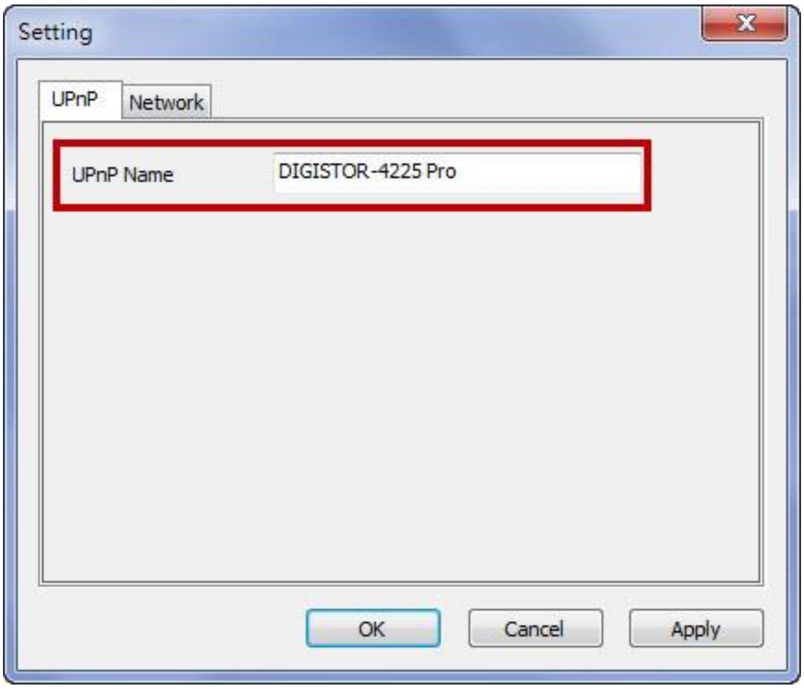
When accessing the NVR setting, users will be prompted to enter username and password. For the first-time use, the default username and password are **admin/admin**. When the correct username and password have been entered, click "**Login**" to continue.


Login
Login
Cancel

Username admin
Password •••••

1) **UPnP**

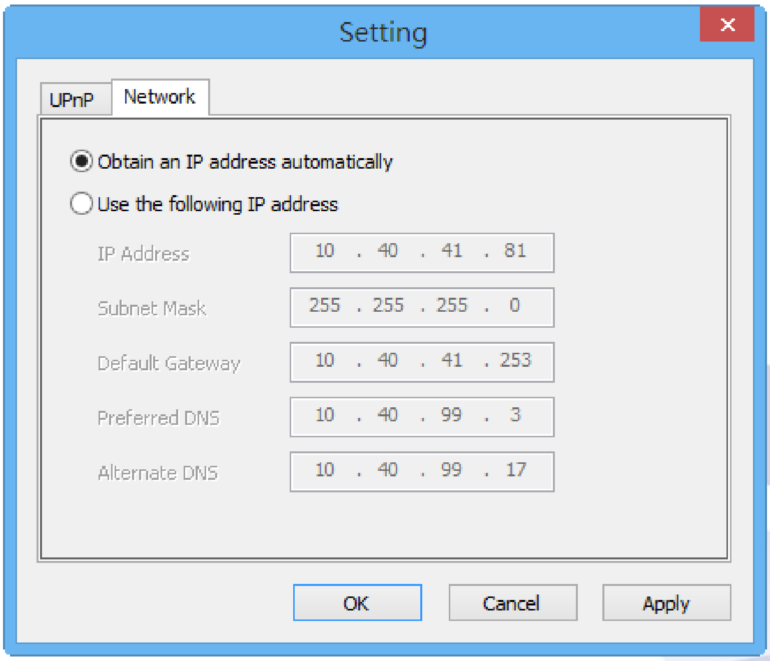
Universal Plug and Play (UPnP) simplifies the process of adding a NVR to a local area network. Once connected to a LAN, NVR will automatically appear on the internet. You can rename UPnP Name on the NVR. Click "**OK**" to finish the setting.


Setting
UPnP
Network
OK
Cancel
Apply

UPnP Name: DIGISTOR-4225 Pro

2) Network

Two models are provided for setting the network: **DHCP** and **Static IP**.


Setting
UPnP
Network
OK
Cancel
Apply

● Obtain an IP address automatically

○ Use the following IP address

IP Address: 10 . 40 . 41 . 81

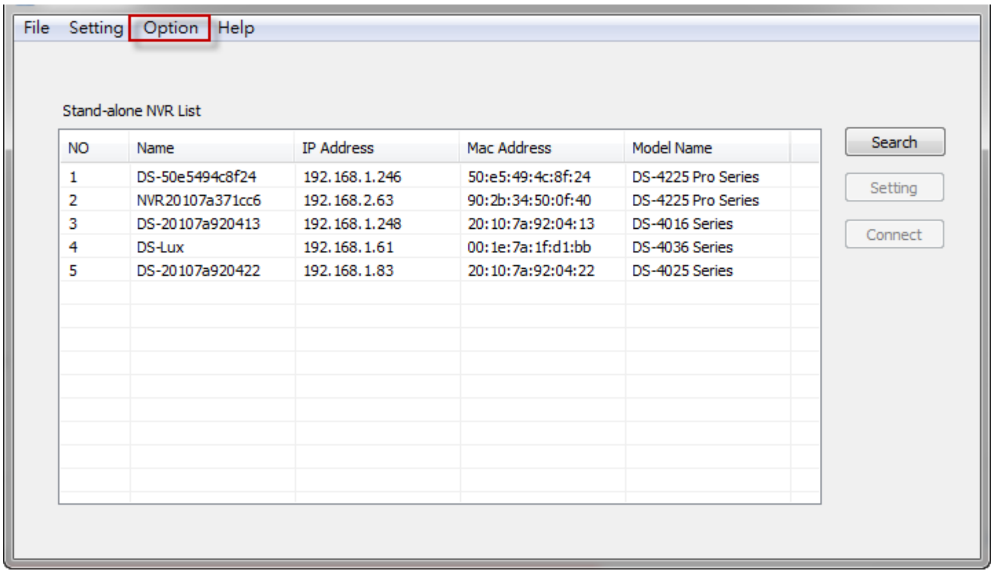
Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 10 . 40 . 41 . 253

Preferred DNS: 10 . 40 . 99 . 3

Alternate DNS: 10 . 40 . 99 . 17

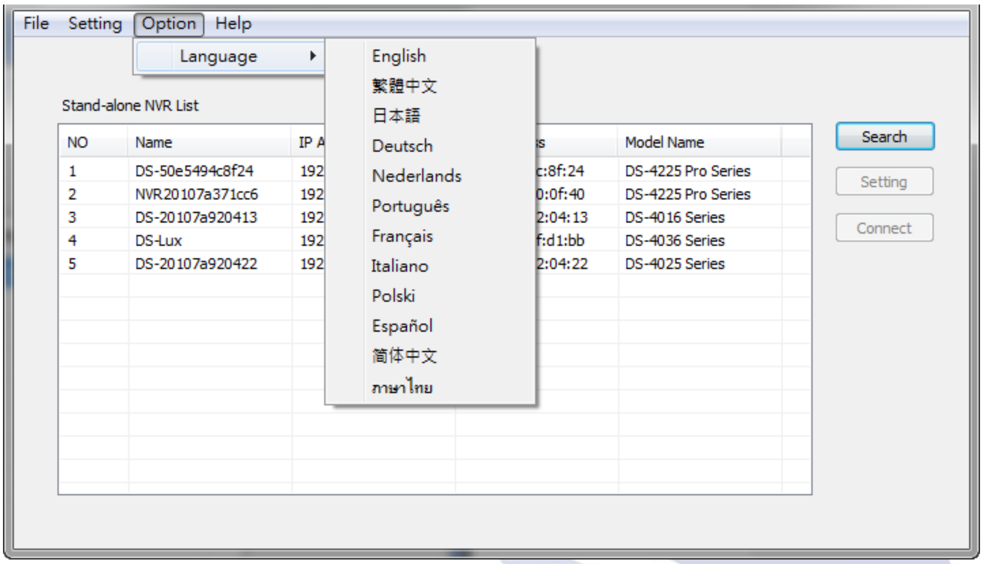
3. Option


File
Setting
Option
Help
Search
Setting
Connect

Stand-alone NVR List

NO	Name	IP Address	Mac Address	Model Name
1	DS-50e5494c8f24	192.168.1.246	50:e5:49:4c:8f:24	DS-4225 Pro Series
2	NVR20107a371cc6	192.168.2.63	90:2b:34:50:0f:40	DS-4225 Pro Series
3	DS-20107a920413	192.168.1.248	20:10:7a:92:04:13	DS-4016 Series
4	DS-Lux	192.168.1.61	00:1e:7a:1f:d1:bb	DS-4036 Series
5	DS-20107a920422	192.168.1.83	20:10:7a:92:04:22	DS-4025 Series

Option provides several languages


File
Setting
Option
Help
Language
English
繁體中文
日本語
Deutsch
Nederlands
Português
Français
Italiano
Polski
Español
简体中文
ภาษาไทย
Search
Setting
Connect

Stand-alone NVR List

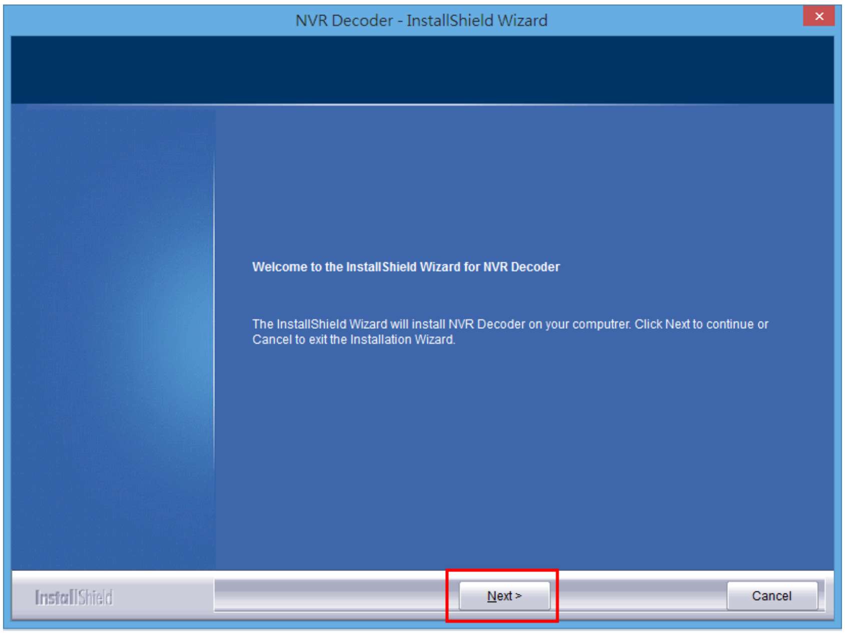
NO	Name	IP A	s	Model Name
1	DS-50e5494c8f24	192	c:8f:24	DS-4225 Pro Series
2	NVR20107a371cc6	192	0:0f:40	DS-4225 Pro Series
3	DS-20107a920413	192	2:04:13	DS-4016 Series
4	DS-Lux	192	f:d1:bb	DS-4036 Series
5	DS-20107a920422	192	2:04:22	DS-4025 Series

Once you click “**Connect**” or **double click** the selected NVR list, IE browser will pop up automatically for the web-based interface.

2.2.3 Install NVR Decoder

Click “**Install S-NVR Decoder**” to install decoder and follow the instructions to setup.

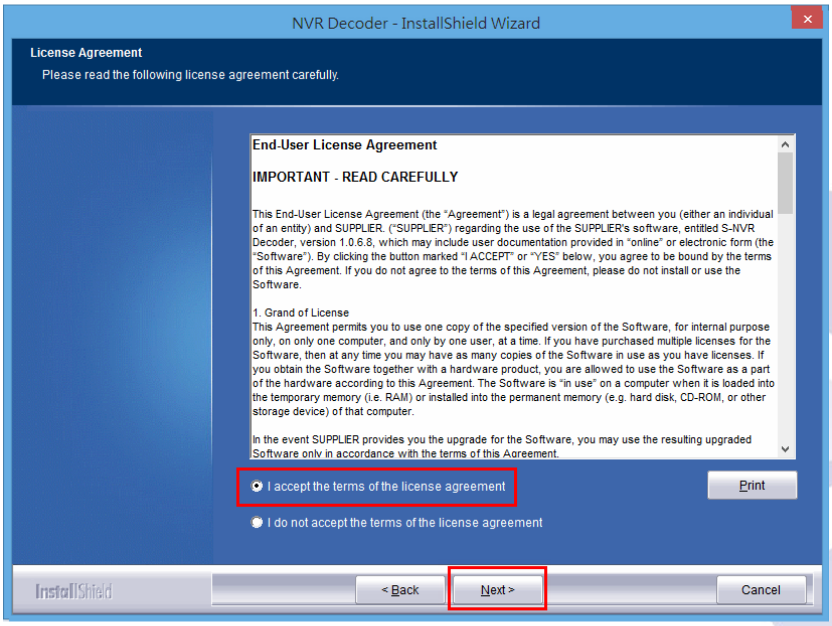
Install NVR Decoder



Welcome to the InstallShield Wizard for NVR Decoder

The InstallShield Wizard will install NVR Decoder on your computrer. Click Next to continue or Cancel to exit the Installation Wizard.

Install Shield Wizard window will pop up and please click “**Next**” to continue installation.



License Agreement

Please read the following license agreement carefully.

End-User License Agreement

IMPORTANT - READ CAREFULLY

This End-User License Agreement (the “Agreement”) is a legal agreement between you (either an individual of an entity) and SUPPLIER. (“SUPPLIER”) regarding the use of the SUPPLIER's software, entitled S-NVR Decoder, version 1.0.6.8, which may include user documentation provided in “online” or electronic form (the “Software”). By clicking the button marked “I ACCEPT” or “YES” below, you agree to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, please do not install or use the Software.

1. Grand of License

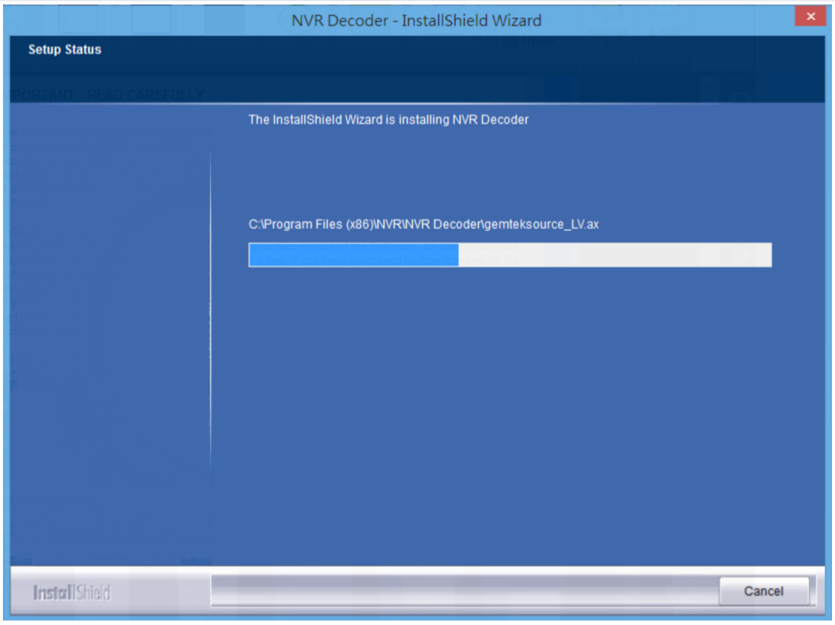
This Agreement permits you to use one copy of the specified version of the Software, for internal purpose only, on only one computer, and only by one user, at a time. If you have purchased multiple licenses for the Software, then at any time you may have as many copies of the Software in use as you have licenses. If you obtain the Software together with a hardware product, you are allowed to use the Software as a part of the hardware according to this Agreement. The Software is “in use” on a computer when it is loaded into the temporary memory (i.e. RAM) or installed into the permanent memory (e.g. hard disk, CD-ROM, or other storage device) of that computer.

In the event SUPPLIER provides you the upgrade for the Software, you may use the resulting upgraded Software only in accordance with the terms of this Agreement.

● I accept the terms of the license agreement

○ I do not accept the terms of the license agreement

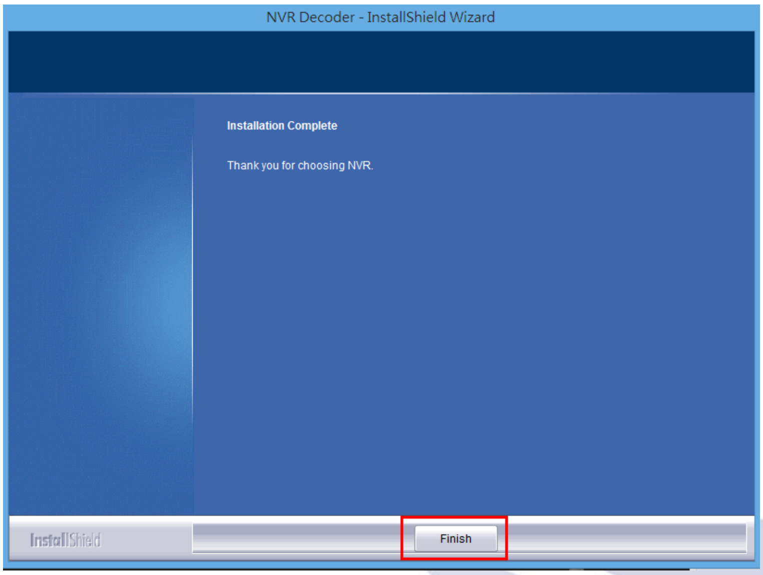
Read license agreement and click “**I accept the terms of the license agreement**.” Click “**Next**” to continue installation.


NVR Decoder - InstallShield Wizard
Setup Status
InstallShield
Cancel

The InstallShield Wizard is installing NVR Decoder

C:\Program Files (x86)\NVR\NVR Decoder\gemteksource_LV.ax

The installation Wizard is installing NVR Decoder.


NVR Decoder - InstallShield Wizard
InstallShield
Finish

Installation Complete

Thank you for choosing NVR.

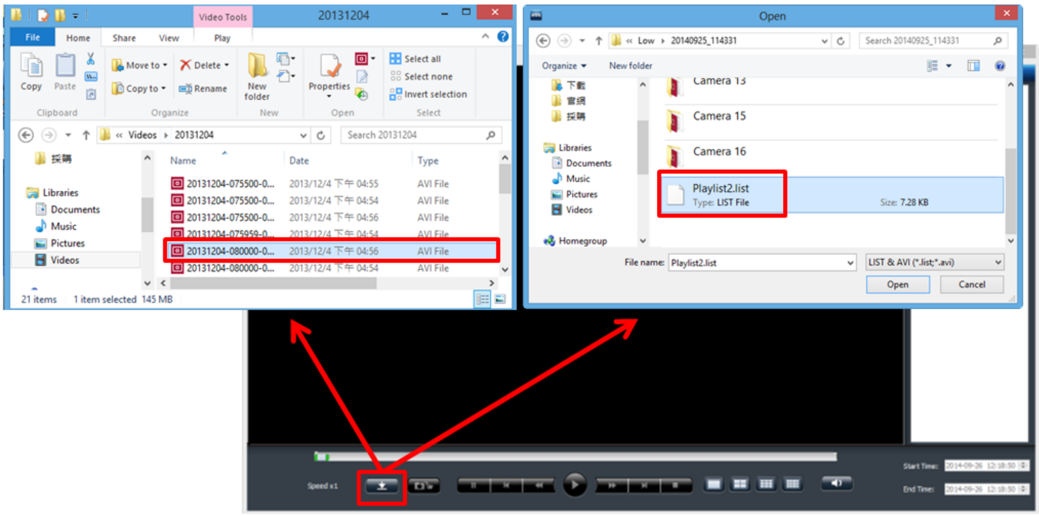
The installation is complete. Please click “**Finish**” to close the window.

2.2.4 NVRPlayer

NVRPlayer allows users to view the recorded videos exported from NVR. It is a portable tool with no need to install on PC. NVRPlayer can play multi-channel videos via playlist which is exported from instant export.

Click “**Open File**” button to select a video or a playlist to play videos.

For more information about export videos to PC, please refer to **4.3.5 Export.**



Name	Date	Type
20131204-075500-0...	2013/12/4 下午 04:55	AVI File
20131204-075500-0...	2013/12/4 下午 04:54	AVI File
20131204-075500-0...	2013/12/4 下午 04:56	AVI File
20131204-075959-0...	2013/12/4 下午 04:54	AVI File
20131204-080000-0...	2013/12/4 下午 04:56	AVI File
20131204-080000-0...	2013/12/4 下午 04:54	AVI File

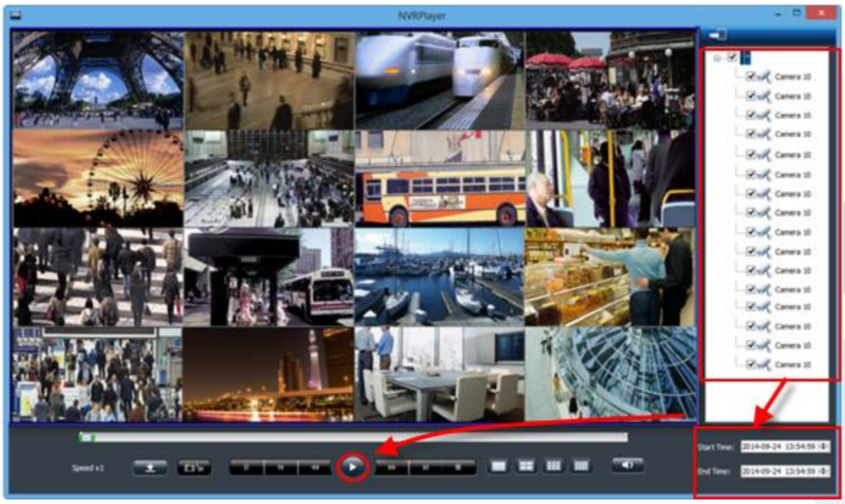
21 items 1 item selected 145 MB

File name: Playlist2.list

LIST & AVI (*.list;*.avi)

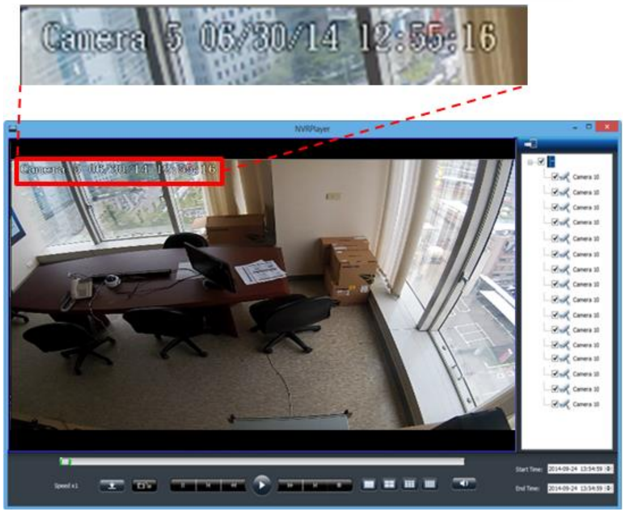
20131204
Video Tools
File
Home
Share
View
Play
Copy
Paste
Move to
Copy to
Delete
Rename
New folder
Properties
Select all
Select none
Invert selection
Clipboard
Organize
New
Open
Select
Videos
Search 20131204
Libraries
Documents
Music
Pictures
Open
20140925_114331
Search 20140925_114331
Organize
New folder
Camera 13
Camera 15
Camera 16
Playlist2.list
Type: LIST File
Size: 7.28 KB
Homegroup
Open
Cancel
Speed x1
Start Time:
End Time:

If users select a playlist to play multi-channel videos, please select cameras, start/end time. Then, click “**Play**” button to play videos.

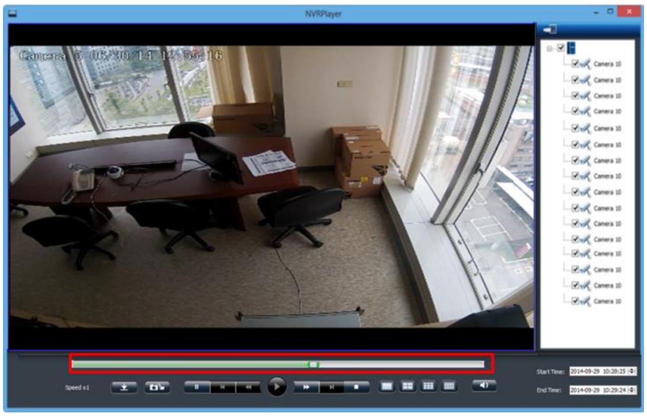


NVRPlayer
Camera 10
Speed x1
Start Time:
End Time:

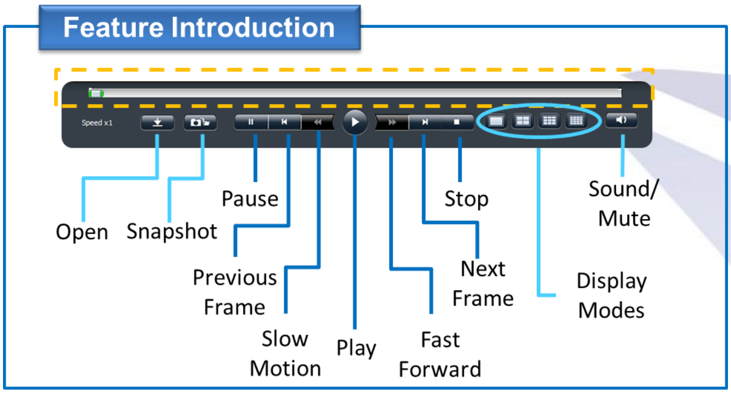
NVRPlayer will display playback video time on the top-left corner for time reference.


Camera 5 06/30/14 12:55:16
NVRPlayer

Users can move "**Time Bar**" to desired time when playing recorded video



Feature introduction


Feature Introduction
Speed x1
Open
Snapshot
Pause
Previous Frame
Slow Motion
Play
Fast Forward
Next Frame
Stop
Display Modes
Sound/ Mute

(1) Frame by Frame Playback

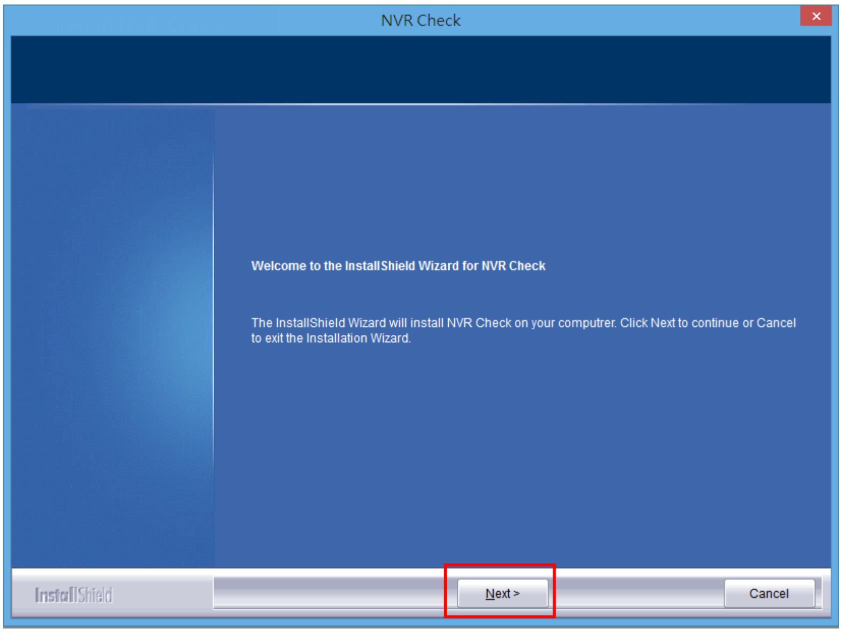
Please click "**Pause**" button and click "**Next Frame**" or "**Previous Frame**" to find the desired video precisey.

(2) Snapshot

Please click "**Snapshot**" button to take a photo to your PC.

2.2.5 Install NVR Check

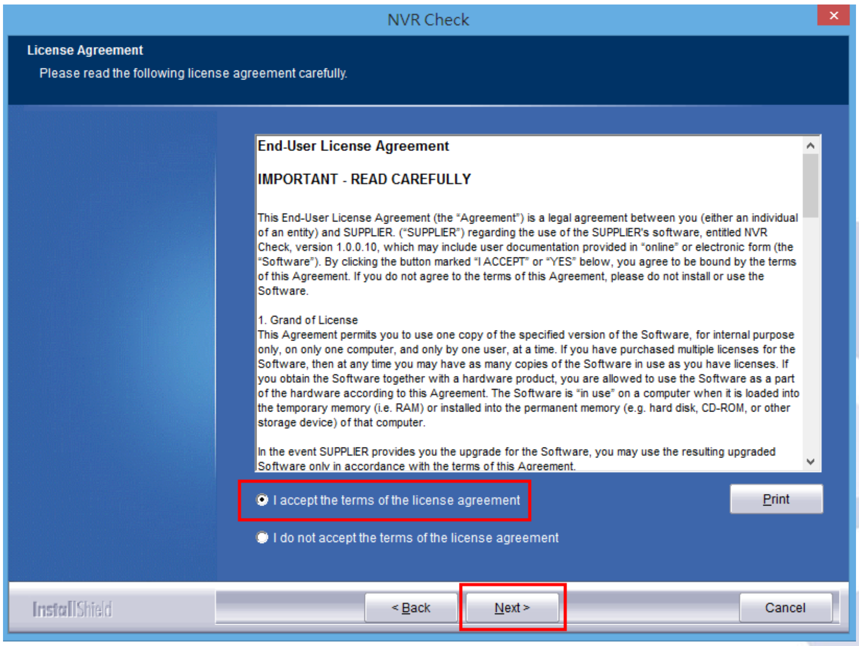
Click “**Install NVR Check**” Install NVR Check to open the folder and double-click on user manual file to read.



Welcome to the InstallShield Wizard for NVR Check

The InstallShield Wizard will install NVR Check on your computrer. Click Next to continue or Cancel to exit the Installation Wizard.

Install Shield Wizard window will pop up and please click “**Next**” to continue installation.



License Agreement

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End-User License Agreement

IMPORTANT - READ CAREFULLY

This End-User License Agreement (the “Agreement”) is a legal agreement between you (either an individual of an entity) and SUPPLIER. (“SUPPLIER”) regarding the use of the SUPPLIER's software, entitled NVR Check, version 1.0.0.10, which may include user documentation provided in “online” or electronic form (the “Software”). By clicking the button marked “I ACCEPT” or “YES” below, you agree to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, please do not install or use the Software.

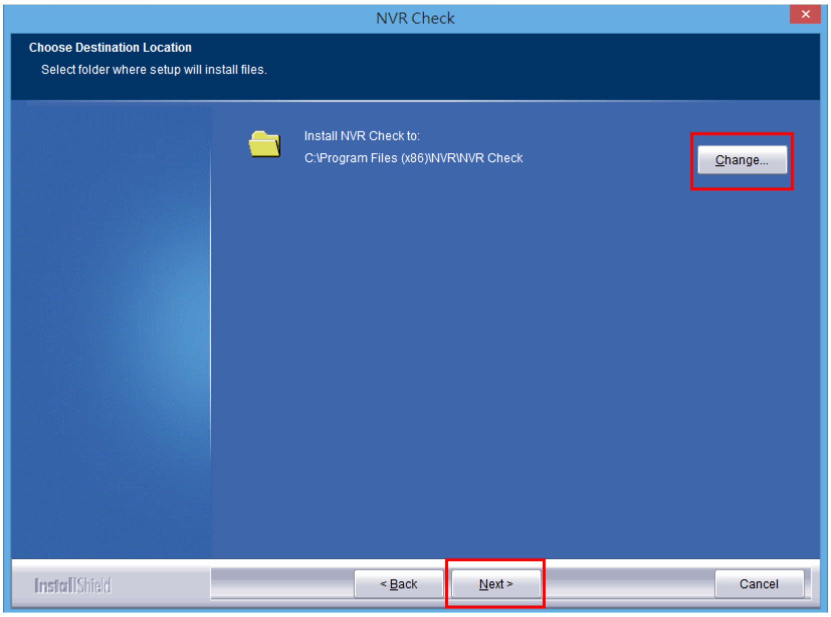
1. Grand of License
This Agreement permits you to use one copy of the specified version of the Software, for internal purpose only, on only one computer, and only by one user, at a time. If you have purchased multiple licenses for the Software, then at any time you may have as many copies of the Software in use as you have licenses. If you obtain the Software together with a hardware product, you are allowed to use the Software as a part of the hardware according to this Agreement. The Software is “in use” on a computer when it is loaded into the temporary memory (i.e. RAM) or installed into the permanent memory (e.g. hard disk, CD-ROM, or other storage device) of that computer.

In the event SUPPLIER provides you the upgrade for the Software, you may use the resulting upgraded Software only in accordance with the terms of this Agreement.

● I accept the terms of the license agreement

○ I do not accept the terms of the license agreement

Read license agreement and click “**I accept the terms of the license agreement**.” Click “**Next**” to continue installation.

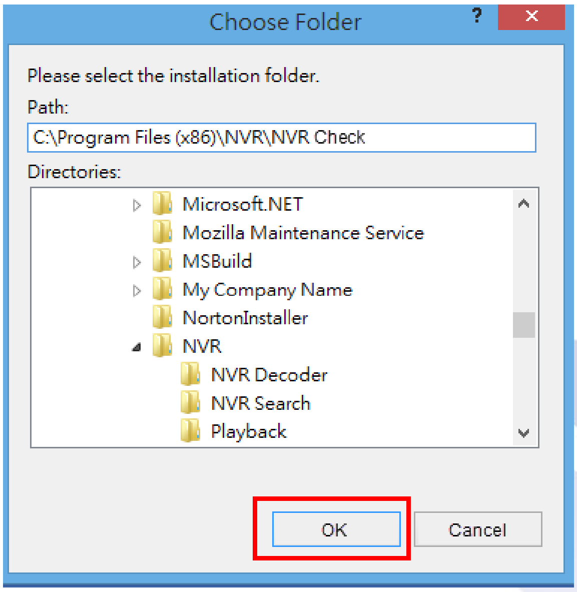


Choose Destination Location

Select folder where setup will install files.

Install NVR Check to:
C:\Program Files (x86)\NVR\NVR Check

Select a location of destination and select a folder where the setup can install files. The default location is: **C:\Program Files (x86)\NVR\NVR Check.** Users can also install NVR Check in other folder by clicking “**Change**” and select a location as below. Click “**OK**” to save the setting.

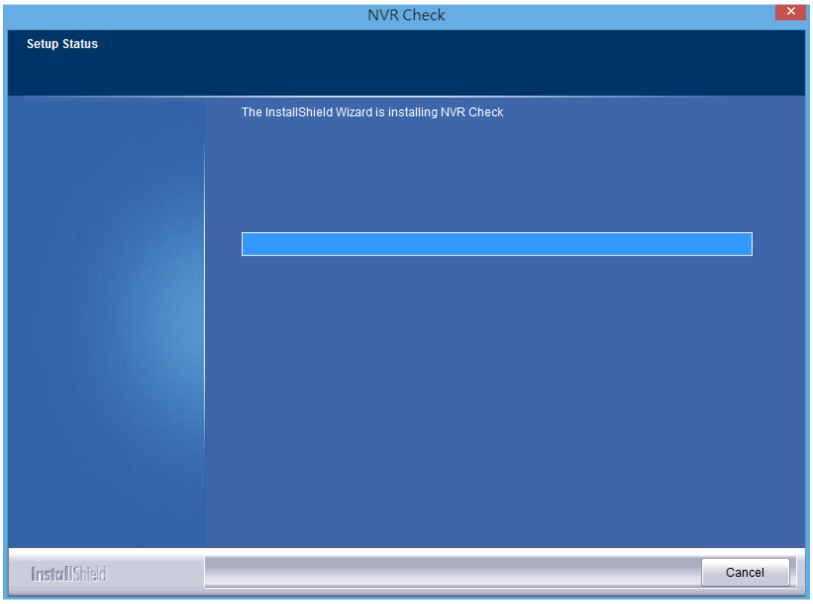


Please select the installation folder.

Path:
C:\Program Files (x86)\NVR\NVR Check

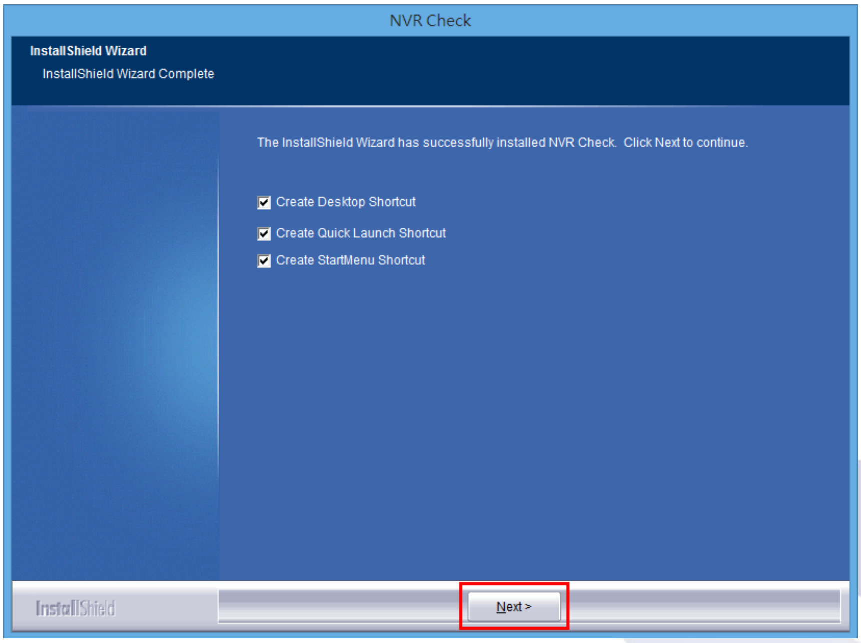
Directories:
- Microsoft.NET
- Mozilla Maintenance Service
- MSBuild
- My Company Name
- NortonInstaller
- NVR
  - NVR Decoder
  - NVR Search
  - Playback

Once a folder is selected, please click “**OK**” to continue installation.


NVR Check
Setup Status
InstallShield
Cancel

The InstallShield Wizard is installing NVR Check

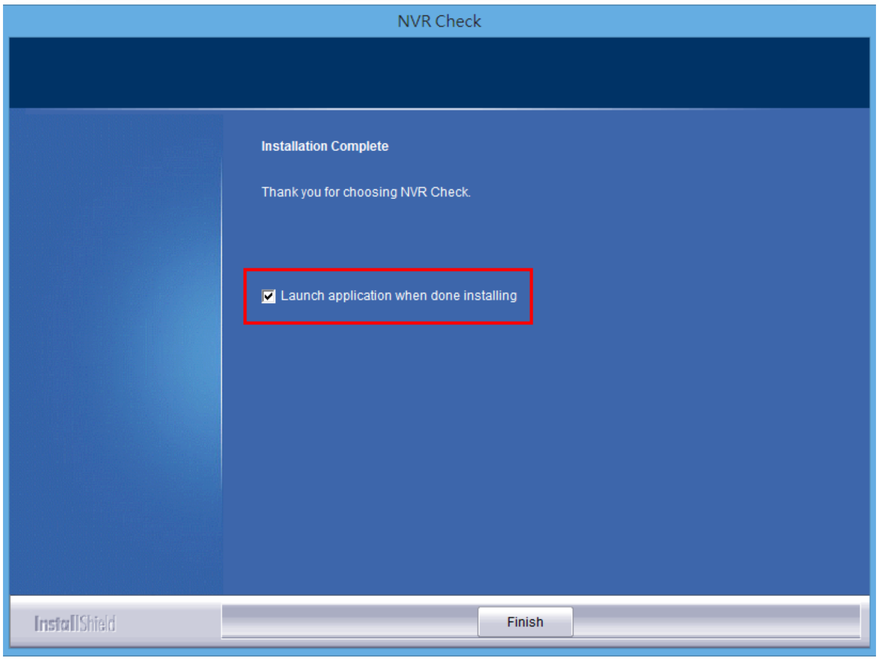
The window shows that the InstallShield Wizard is installing NVR Check. Please wait until the Wizard completes the installation.


NVR Check
InstallShield Wizard
InstallShield Wizard Complete
InstallShield
Next >

The InstallShield Wizard has successfully installed NVR Check. Click Next to continue.

☑ Create Desktop Shortcut
☑ Create Quick Launch Shortcut
☑ Create StartMenu Shortcut

The InstallShield has successfully installed NVR Check. Select "**Create Desktop Shortcut**"/ "**Create Quick Launch Shortcut**"/ "**Create Start Menu Shortcut**" and please click "**Next**" to continue.

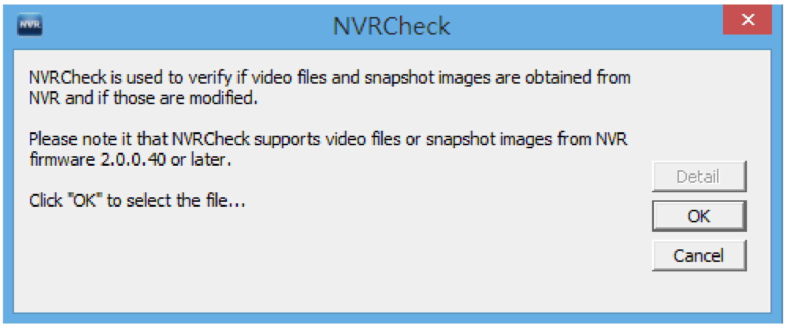


Installation Complete

Thank you for choosing NVR Check.

☑ Launch application when done installing

The installation is complete. Please click “**Launch application when done installing**” to execute NVR Chec.



NVRCheck is used to verify if video files and snapshot images are obtained from NVR and if those are modified.

Please note it that NVRCheck supports video files or snapshot images from NVR firmware 2.0.0.40 or later.

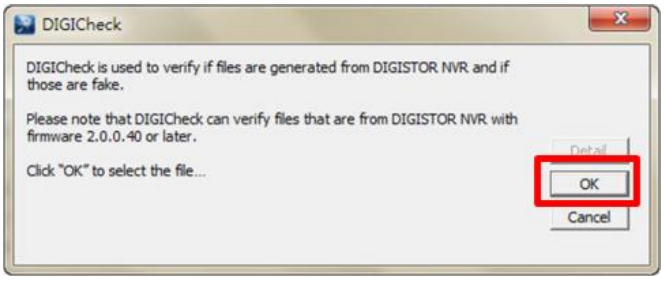
Click "OK" to select the file...

After finishing the setup, the window of NVR Check will pop up.

Introduction of NVR Check

While NVR is recording video and snapshot files, the digital watermark will be embedded automatically in the images.
To ensure the security of videos and snapshots, **NVR Check** is a useful tool to verify whether the files are originated from NVR.

Please double click the icon to start the application.
Click “OK” to choose the video clip or picture that wanted to be verified.

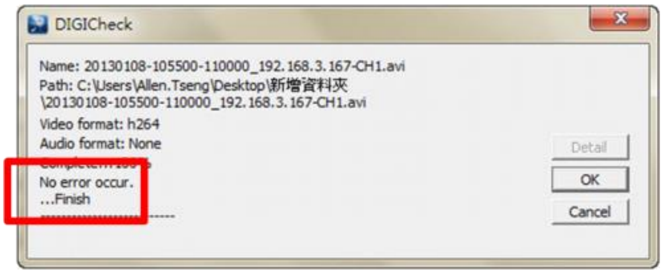

DIGICheck

DIGICheck is used to verify if files are generated from DIGISTOR NVR and if those are fake.

Please note that DIGICheck can verify files that are from DIGISTOR NVR with firmware 2.0.0.40 or later.

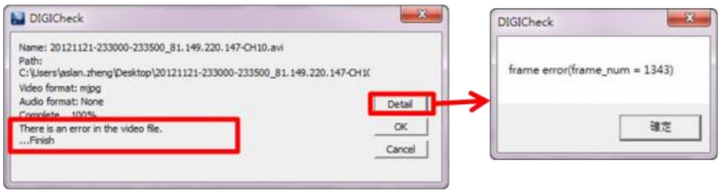
Click "OK" to select the file...

If the recording file is originated from NVR, the window will display “No error occur.”


DIGICheck

Name: 20130108-105500-110000_192.168.3.167-CH1.avi
Path: C:\Users\Allen.Tseng\Desktop\新增資料夾\20130108-105500-110000_192.168.3.167-CH1.avi
Video format: h264
Audio format: None
No error occur.
...Finish

If the recording file has been changed, the window will display “There is an error in the video file.”


DIGICheck

Name: 20121121-233000-233500_81.149.220.147-CH10.avi
Path:
C:\Users\aslan.zheng\Desktop\20121121-233000-233500_81.149.220.147-CH1(
Video format: mjpg
Audio format: None
Complete 100%
There is an error in the video file.
...Finish

DIGICheck

frame error(frame_num = 1343)

To know more information, please ask the manufacturer by providing detailed information in “Detail” button.

2.2.6 User Manual

Click “**User Manual**” User Manual to open the folder and double-click on user manual file to read.

2.2.7 Browse CD

Click “**Browse CD**” Browse CD to open the folder of current Autorun.exe file.

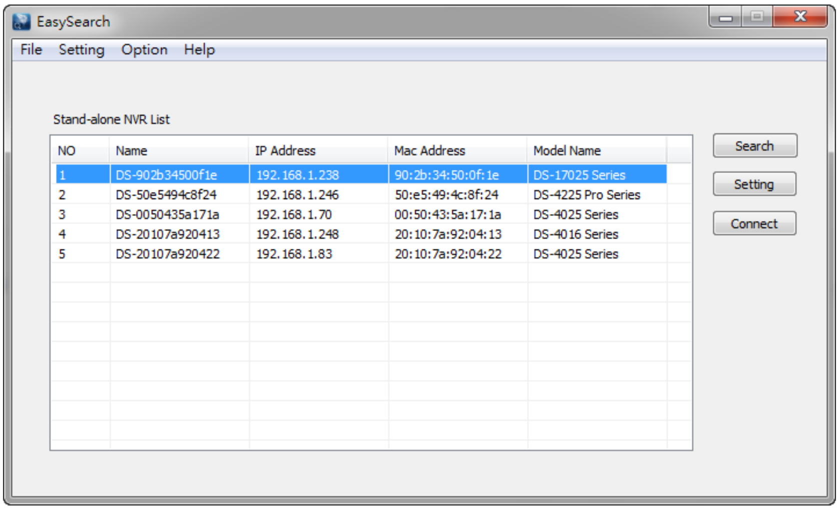
2.2.8 Activate Live View Service

1. Connect to NVR

After setting the EZ Search and S-NVR Decoder, users can connect to the web-based interface by the following two options: **EZ Search** or **IE browser**

1) EZ Search

Once you click "**Connect**" or **double click** the selected NVR list, the IE browser will pop up automatically.


EasySearch
File
Setting
Option
Help
Search
Setting
Connect

Stand-alone NVR List

NO	Name	IP Address	Mac Address	Model Name
1	DS-902b34500f1e	192.168.1.238	90:2b:34:50:0f:1e	DS-17025 Series
2	DS-50e5494c8f24	192.168.1.246	50:e5:49:4c:8f:24	DS-4225 Pro Series
3	DS-0050435a171a	192.168.1.70	00:50:43:5a:17:1a	DS-4025 Series
4	DS-20107a920413	192.168.1.248	20:10:7a:92:04:13	DS-4016 Series
5	DS-20107a920422	192.168.1.83	20:10:7a:92:04:22	DS-4025 Series

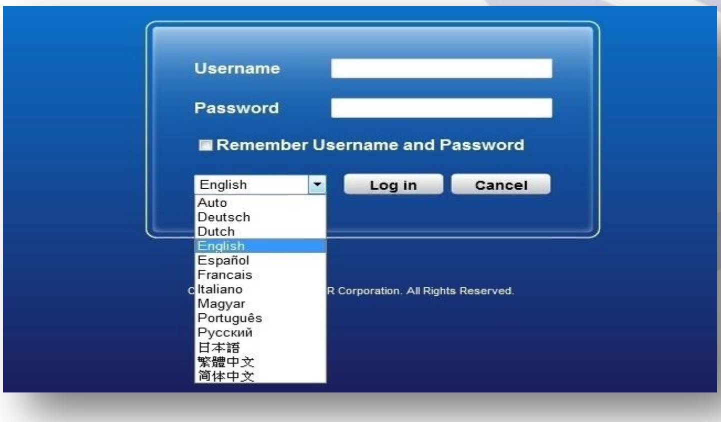
2) IE browser

Log in to the system by entering its IP address in IE browser.

2. Enter username and password:

For first-time use, the default username and password are "**admin/admin**."

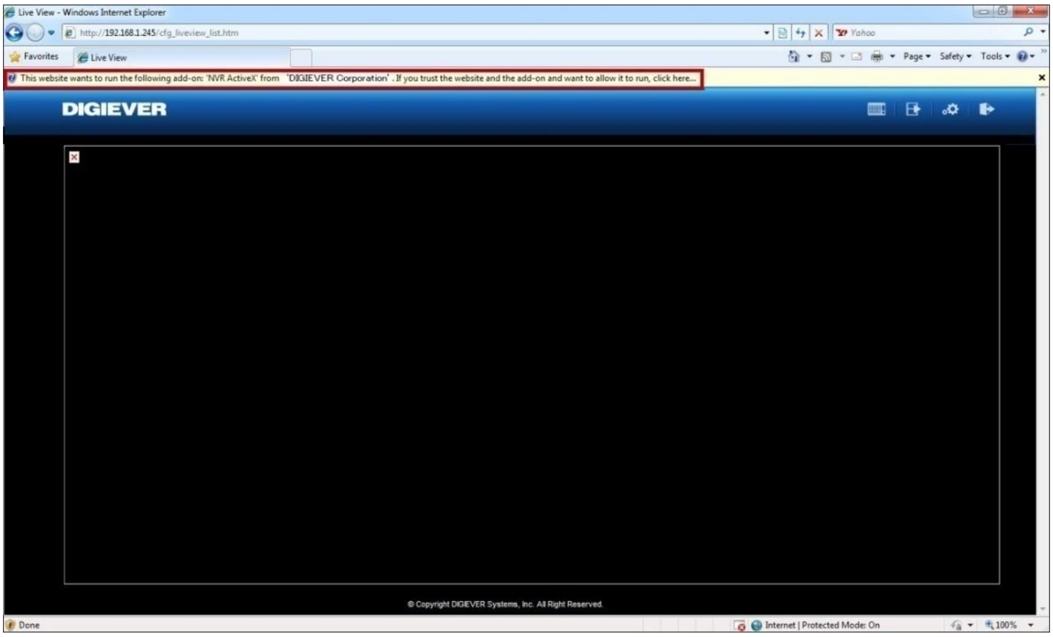
3. Select the languages for the UI.


Username
Password
Remember Username and Password
English
Log in
Cancel
Auto
Deutsch
Dutch
English
Español
Francais
Italiano
Magyar
Português
Русский
日本語
繁體中文
簡体中文
R Corporation. All Rights Reserved.

4. Allow ActiveX Control

After logging in the NVR, users are recommended to install **ActiveX control** for the first-time installation.

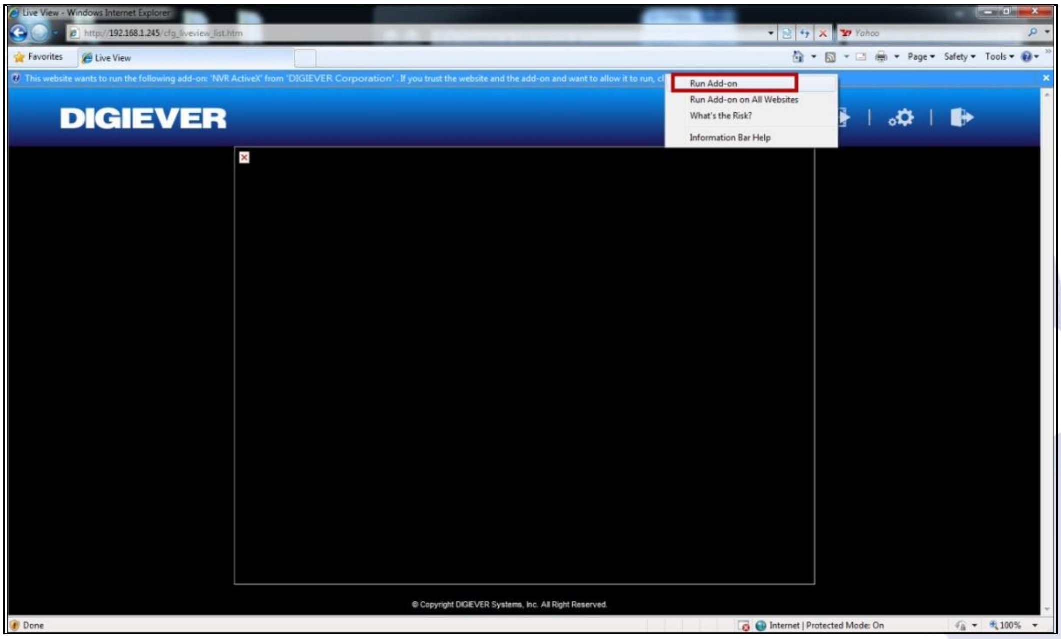
1) Left-click on the description "**This website wants to run the following add-on: 'NVR ActiveX' from…..**"



This website wants to run the following add-on: 'NVR ActiveX' from 'DIGIEVER Corporation'. If you trust the website and the add-on and want to allow it to run, click here...

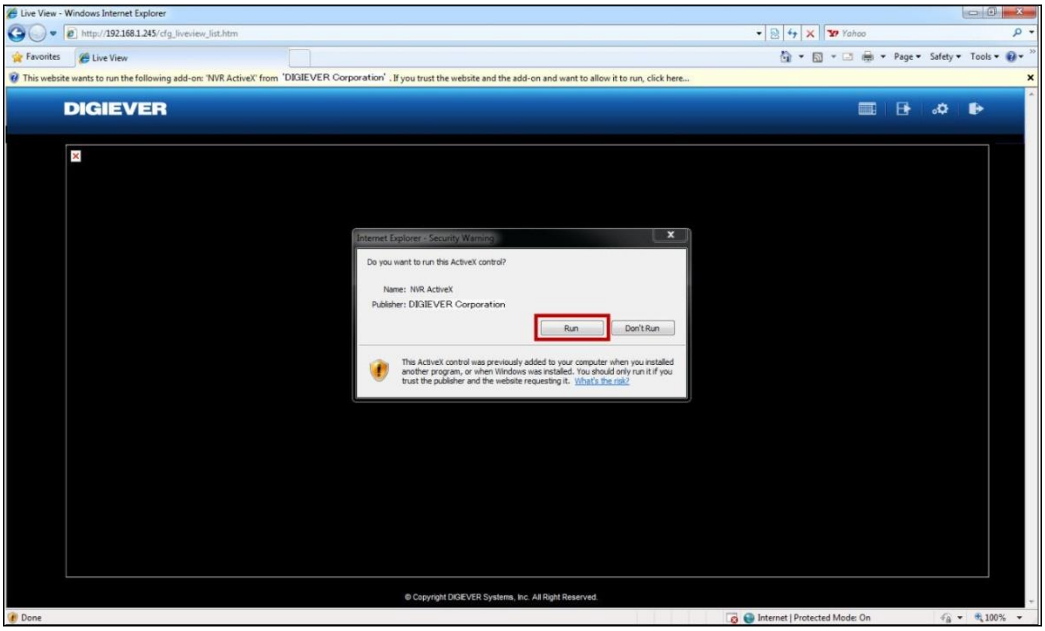
Live View - Windows Internet Explorer
http://192.168.1.245/cfg_liveview_list.htm
Favorites
Live View
DIGIEVER
© Copyright DIGIEVER Systems, Inc. All Right Reserved.
Done
Internet | Protected Mode: On
100%

2) Left-click on the description "**Run Add on.**"



Live View - Windows Internet Explorer
http://192.168.1.245/cfg_liveview_list.htm
Favorites
Live View
DIGIEVER
Run Add-on
Run Add-on on All Websites
What's the Risk?
Information Bar Help
© Copyright DIGIEVER Systems, Inc. All Right Reserved.
Done
Internet | Protected Mode: On
100%

3) Left-click “**Run**” to use licensed ActiveX controls.



This website wants to run the following add-on: 'NVR ActiveX' from 'DIGIEVER Corporation'. If you trust the website and the add-on and want to allow it to run, click here...

Internet Explorer - Security Warning

Do you want to run this ActiveX control?

Name: NVR ActiveX
Publisher: DIGIEVER Corporation

This ActiveX control was previously added to your computer when you installed another program, or when Windows was installed. You should only run it if you trust the publisher and the website requesting it. What's the risk?

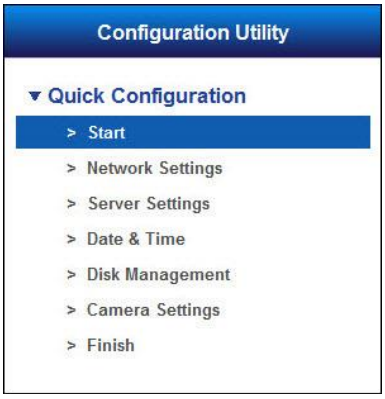
Live View - Windows Internet Explorer
http://192.168.1.245/cfg_liveview_list.htm
Yahoo
Favorites
Live View
Page
Safety
Tools
DIGIEVER
Run
Don't Run
© Copyright DIGEVER Systems, Inc. All Right Reserved.
Done
Internet | Protected Mode: On
100%

2.3 Quick Configuration

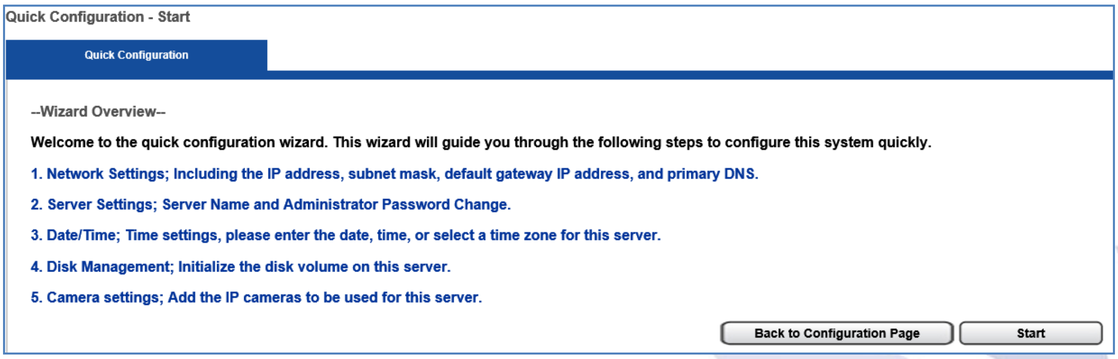
After users log in NVR and install the ActiveX control, the system will direct you to set Quick Configuration in five main steps. Follow the instructions of the **Overview of wizard** to complete system setup.

2.3.1 Start

System will lead you to "**Start**" from the drop-down menu of **Configuration Utility** to begin.


Configuration Utility
▼ Quick Configuration
> Start
> Network Settings
> Server Settings
> Date & Time
> Disk Management
> Camera Settings
> Finish

To initial the configuration, please study the **Overview of wizard** first. Through five steps, the wizard will guide you to set up the system quickly.


Quick Configuration - Start
Quick Configuration
Back to Configuration Page
Start

--Wizard Overview--

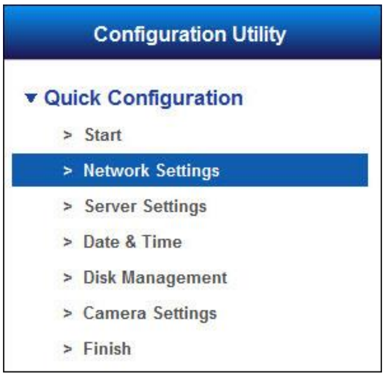
Welcome to the quick configuration wizard. This wizard will guide you through the following steps to configure this system quickly.

1. Network Settings; Including the IP address, subnet mask, default gateway IP address, and primary DNS.
2. Server Settings; Server Name and Administrator Password Change.
3. Date/Time; Time settings, please enter the date, time, or select a time zone for this server.
4. Disk Management; Initialize the disk volume on this server.
5. Camera settings; Add the IP cameras to be used for this server.

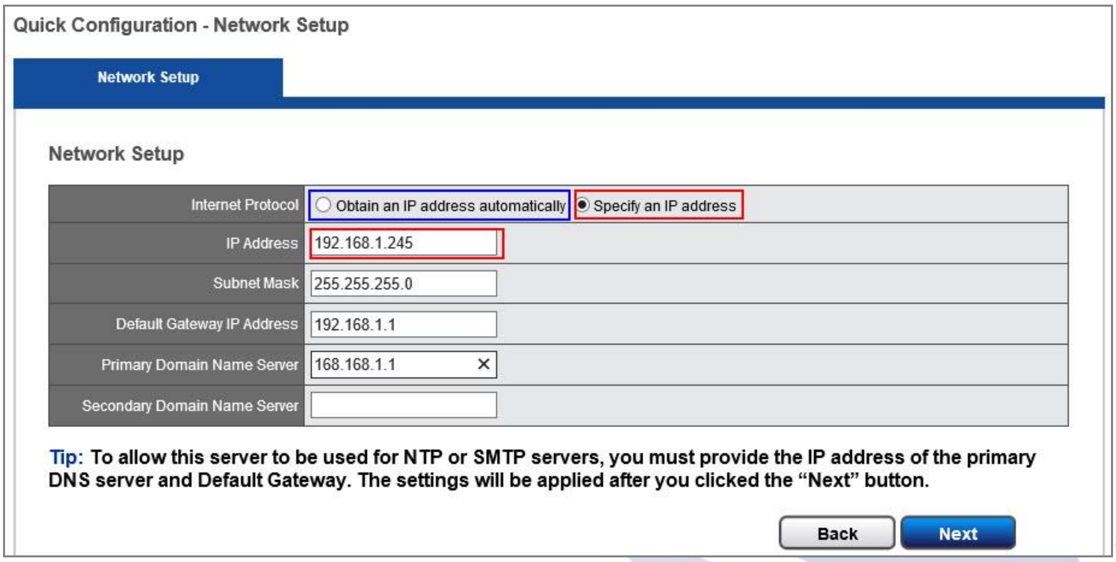
Click "**Start**" in Overview of wizard page to begin Quick Configuration.

2.3.2 Network Settings

Please select “**Network Settings**” from the drop-down menu of **Configuration Utility** to begin.


Configuration Utility
▾ Quick Configuration
> Start
> Network Settings
> Server Settings
> Date & Time
> Disk Management
> Camera Settings
> Finish

Users need to adjust the settings in the Network Setup page in order to let NVR work properly within network.


Quick Configuration - Network Setup
Network Setup
Back
Next

Network Setup

Internet Protocol	○ Obtain an IP address automatically ● Specify an IP address
IP Address	192.168.1.245
Subnet Mask	255.255.255.0
Default Gateway IP Address	192.168.1.1
Primary Domain Name Server	168.168.1.1
Secondary Domain Name Server	

Tip: To allow this server to be used for NTP or SMTP servers, you must provide the IP address of the primary DNS server and Default Gateway. The settings will be applied after you clicked the “Next” button.

- **There are 2 methods to configure IP address**
  1. **Obtain an IP address automatically (NVR Default)**

     Obtain an available dynamic IP address assigned by a DHCP server. If this option is selected, NVR will automatically obtain an available dynamic IP address from the DHCP server once it connects to the network.
  2. **Specify an IP address.**

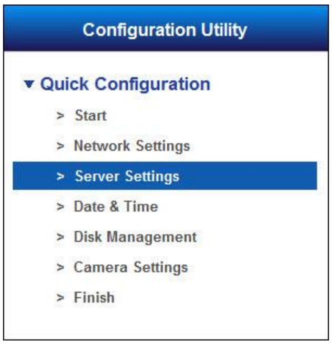
     If there is no DHCP server existing in network environments, the static IP address will be given as192.168.1.245. It should be adaptable in most networking environment, and user can choose to maintain the default IP address or change it in this page. However, it’s recommended setting different IP address of NVR if there is more than one NVR in the same LAN.

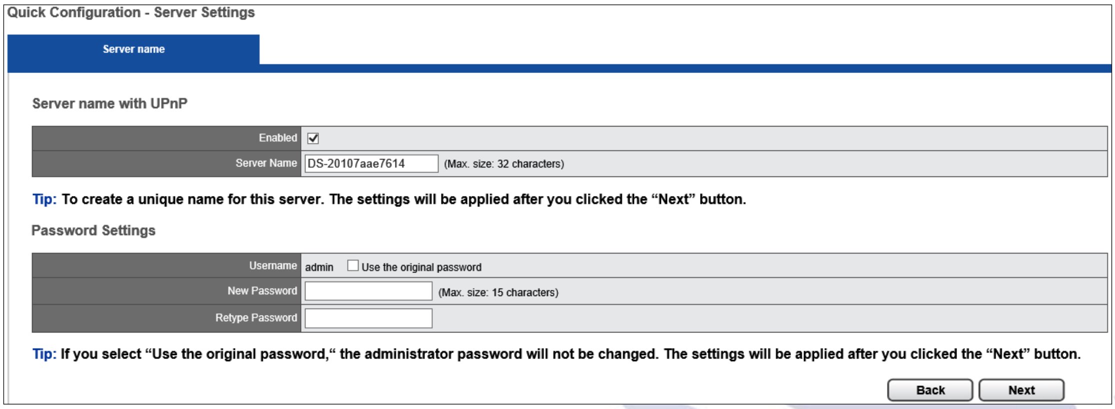
To assign a static IP address to the NVR:

1. Select "**Specify an IP address**"
2. Enter the **IP address**, **Subnet Mask**, **Default Gateway IP Address** and **DNS** server address.
3. If IP Address is changed, user needs to log out NVR and login in again.
   Click "**Next**" to proceed with the configuration.

2.3.3 Server Settings

Please select "**Server Settings**" from the drop-down menu of **Configuration Utility** to begin.


Configuration Utility
▾ Quick Configuration
> Start
> Network Settings
> Server Settings
> Date & Time
> Disk Management
> Camera Settings
> Finish


Quick Configuration - Server Settings
Server name

Server name with UPnP

Enabled	☑
Server Name	DS-20107aae7614 (Max. size: 32 characters)

Tip: To create a unique name for this server. The settings will be applied after you clicked the "Next" button.

Password Settings

Username	admin ☐ Use the original password
New Password	(Max. size: 15 characters)
Retype Password	

Tip: If you select "Use the original password," the administrator password will not be changed. The settings will be applied after you clicked the "Next" button.

(3) Server name with UPnP

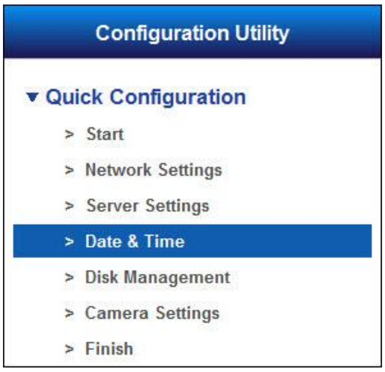
Universal Plug and Play (UPnP) simplifies the process of adding a NVR to a local area network. Once connected to LAN, the NVR will automatically appear on the internet. User can select to enable the function with UPnP and edit a sever name.

(4) Password Settings

Each NVR comes with a built-in "**admin**" account with password "**admin.**" It's highly recommended to change the password upon the initial login. Enter a new password in the "**New Password**" field and enter it again in "**Retype Password.**" Since you confirm "**Next**," the administrator password will be changed.

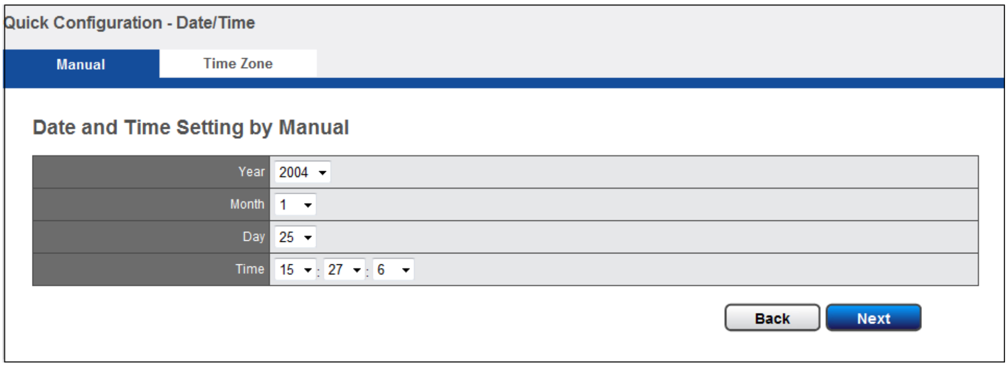
2.3.4 Date & Time

Please select “**Date & Time**” from the drop-down menu of **Configuration Utility** to begin.


Configuration Utility
▼ Quick Configuration
> Start
> Network Settings
> Server Settings
> Date & Time
> Disk Management
> Camera Settings
> Finish

1. Manual setting

Use the drop-down list and configure the time manually. Select the **Year, Month, Date** and **Time**. Time setting will be effective when you click “**Next**.”


Quick Configuration - Date/Time

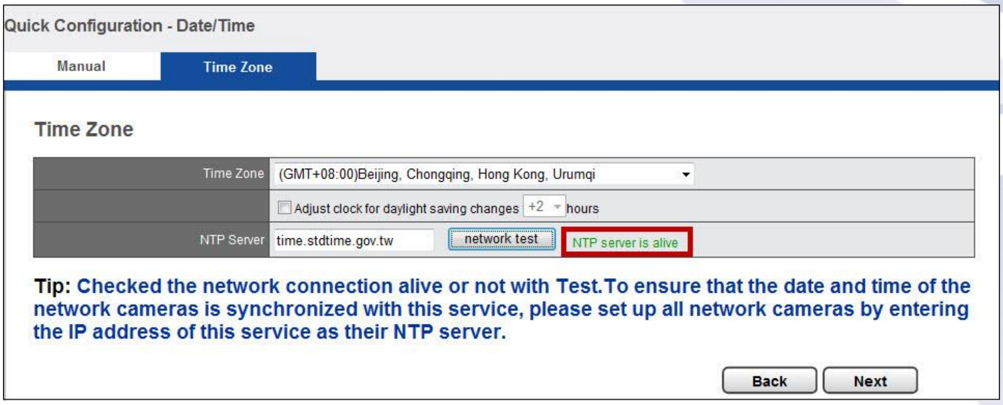
Date and Time Setting by Manual

Year	2004
Month	1
Day	25
Time	15 : 27 : 6

Manual
Time Zone
Back
Next

2. Time Zone: Synchronize with an Internet time server automatically.

Select the time zone of your area and update the date and time of the NVR automatically with an NTP server. User also has an option to automatically adjust daylight saving time.


Quick Configuration - Date/Time

Time Zone

Time Zone	(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi
	☐ Adjust clock for daylight saving changes +2 hours
NTP Server	time.stdtime.gov.tw network test NTP server is alive

Tip: Checked the network connection alive or not with Test.To ensure that the date and time of the network cameras is synchronized with this service, please set up all network cameras by entering the IP address of this service as their NTP server.

Manual
Time Zone
Back
Next

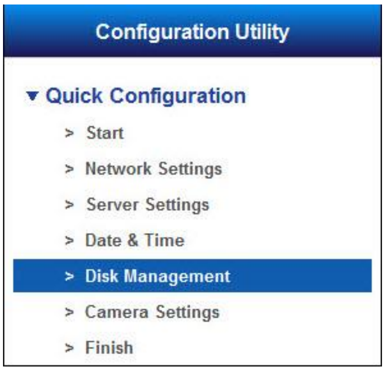
Configure the time and date by verifying and adjusting current local time and daylight saving to avoid the following errors:

- Incorrect display time for playback videos.
- Inconsistent display time of event logs and when they actually occur.

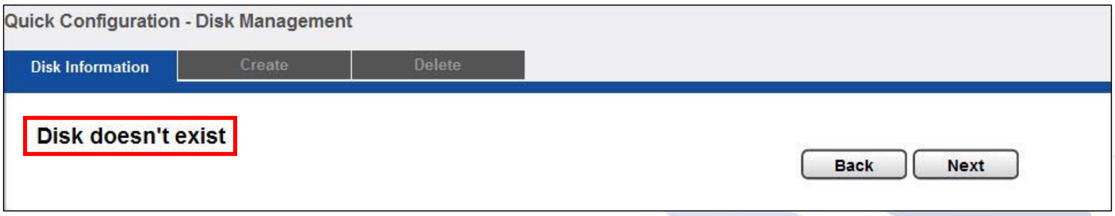
Please enter the hostname of a valid NTP server to synchronize the server time with an Internet time server. NTP (Network Time Protocol) is a protocol to synchronize the clocks of a computer system.

2.3.5 Disk Management

Please select "**Disk Management**" from the drop-down menu of **Configuration Utility** to begin.


Configuration Utility
▼ Quick Configuration
> Start
> Network Settings
> Server Settings
> Date & Time
> Disk Management
> Camera Settings
> Finish

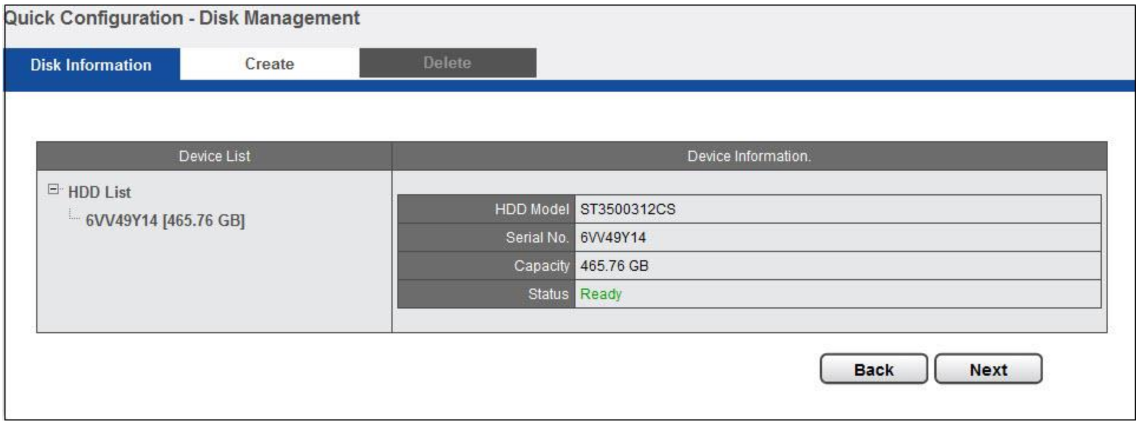
If hard disk is not installed in NVR, the page will show "**Disk doesn't exist.**"


Quick Configuration - Disk Management
Disk Information
Create
Delete
Back
Next

Disk doesn't exist

Once an available hard disk drive is inserted into the tray, Disk Information will show in **Device Information** and users can start to create new RAID Disk.

1. Disk Information

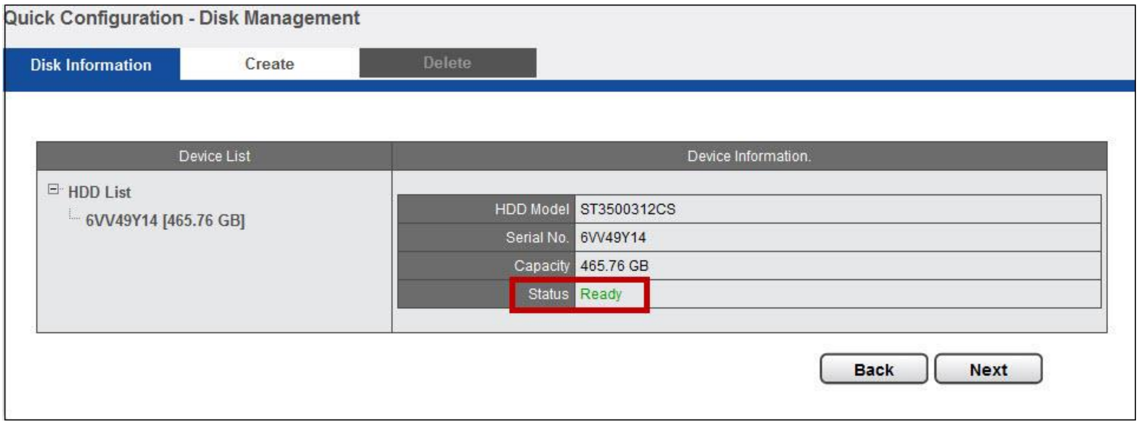

Quick Configuration - Disk Management
Disk Information
Create
Delete
Device List
Device Information.
HDD List
Back
Next

6VV49Y14 [465.76 GB]

HDD Model ST3500312CS
Serial No. 6VV49Y14
Capacity 465.76 GB
Status Ready

Device Information provides details of the hard disk drive: **HDD Model**, **Serial NO.**, **Capacity** and **Status**.

2. Create

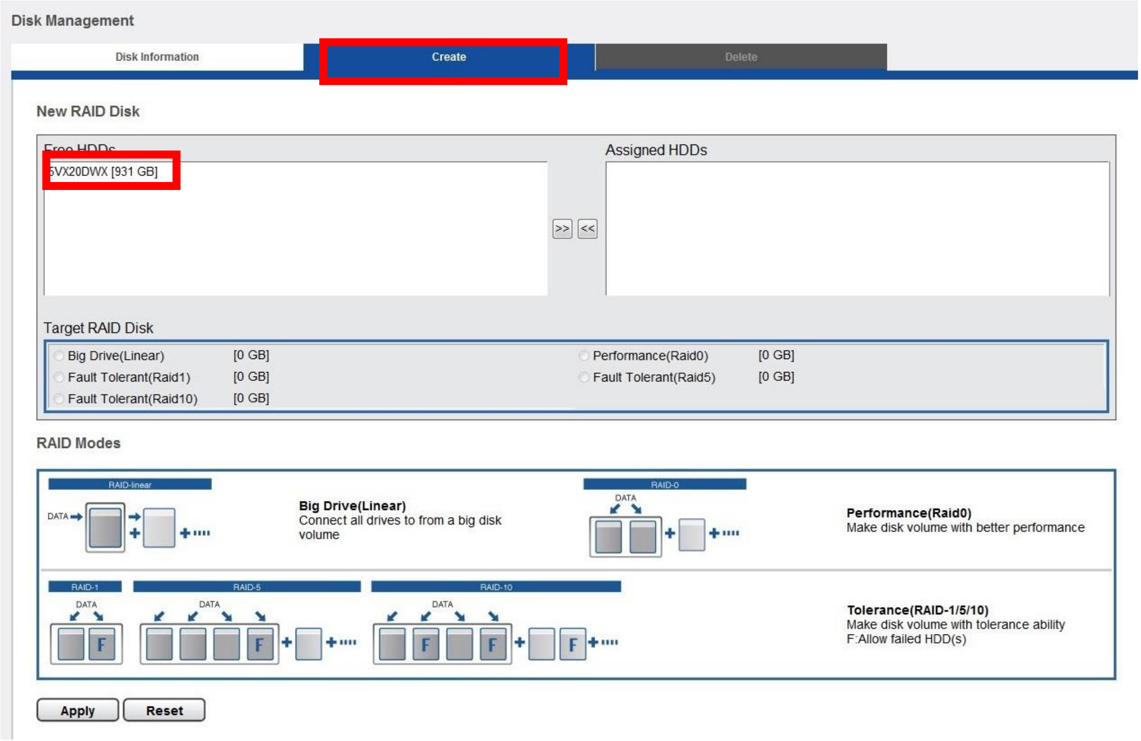

Quick Configuration - Disk Management
Disk Information
Create
Delete
Device List
Device Information.
HDD List
Back
Next

6VV49Y14 [465.76 GB]

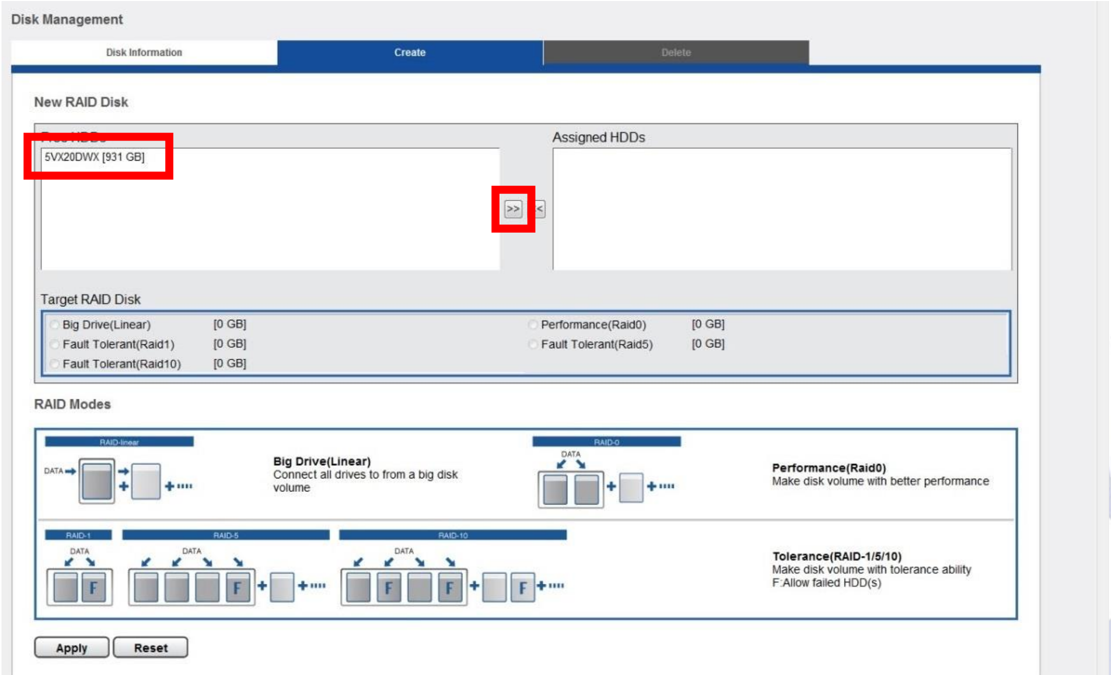
HDD Model ST3500312CS
Serial No. 6VV49Y14
Capacity 465.76 GB
Status Ready

As the hard disk drive is available, the status of Device Information shows “**Ready,**” which indicates the hard disk drive is **ready to be created**.

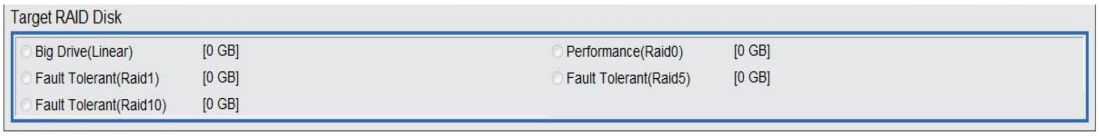
Please click “**Create**” to enter the window for building New RAID Disk and select the hard disk drive in the Free HDDs field.


Disk Management
Disk Information
Create
Delete
New RAID Disk
Free HDDs
5VX20DWX [931 GB]
>>
<<
Assigned HDDs
Target RAID Disk
Big Drive(Linear) [0 GB]
Fault Tolerant(Raid1) [0 GB]
Fault Tolerant(Raid10) [0 GB]
Performance(Raid0) [0 GB]
Fault Tolerant(Raid5) [0 GB]
RAID Modes
RAID-linear
DATA
Big Drive(Linear)
Connect all drives to from a big disk volume
RAID-0
Performance(Raid0)
Make disk volume with better performance
RAID-1
RAID-5
RAID-10
Tolerance(RAID-1/5/10)
Make disk volume with tolerance ability
F:Allow failed HDD(s)
Apply
Reset

The selected hard disk drive in the Free HDDs field will be marked in blue and please click >> to recruit the hard disk drive into Assigned HDDs field.


Disk Management
Disk Information
Create
Delete
New RAID Disk
Free HDDs
5VX20DWX [931 GB]
>>
<
Assigned HDDs
Target RAID Disk
Big Drive(Linear) [0 GB]
Fault Tolerant(Raid1) [0 GB]
Fault Tolerant(Raid10) [0 GB]
Performance(Raid0) [0 GB]
Fault Tolerant(Raid5) [0 GB]
RAID Modes
Big Drive(Linear)
Connect all drives to from a big disk volume
Performance(Raid0)
Make disk volume with better performance
Tolerance(RAID-1/5/10)
Make disk volume with tolerance ability
F:Allow failed HDD(s)
Apply
Reset

The selected hard disk drive in Assigned HDDs field will be marked in blue.



Target RAID Disk

○ Big Drive(Linear) [0 GB]

○ Performance(Raid0) [0 GB]

○ Fault Tolerant(Raid1) [0 GB]

○ Fault Tolerant(Raid5) [0 GB]

○ Fault Tolerant(Raid10) [0 GB]

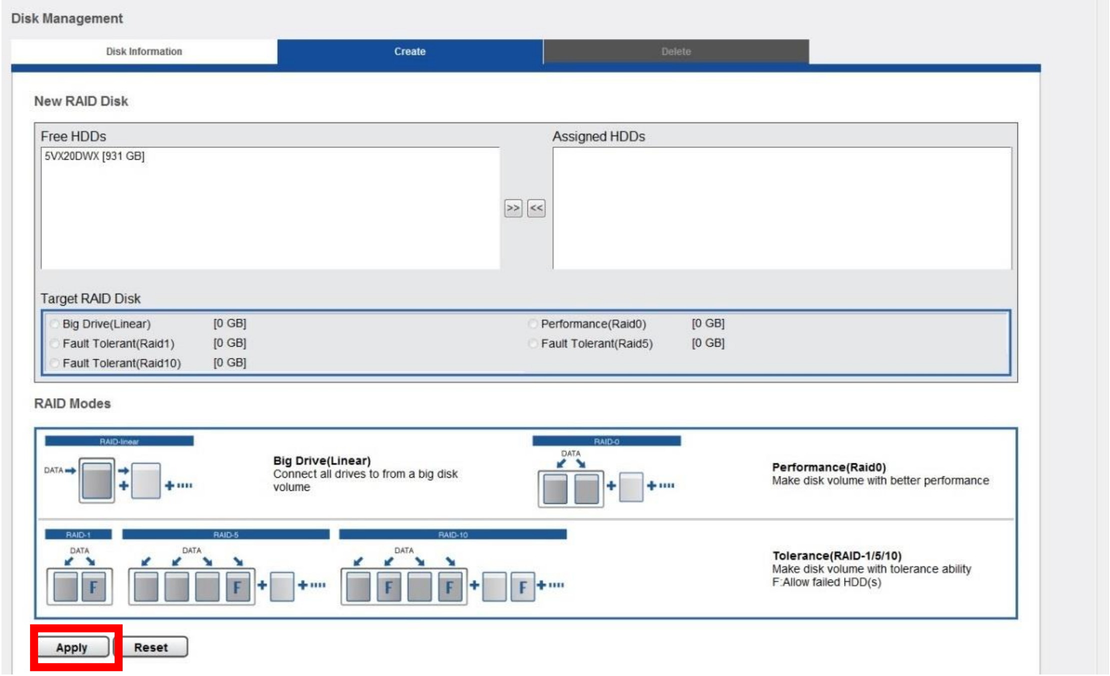
Meanwhile, Target RAID Disk is ready to build RAID disk and it shows five types of disk configuration.

The introduction of disk configuration is in the below table.

Disk Configuration

Big Drive (Linear)	Big Drive is a collection of hard disk drives and does not provide any RAID protection. The data are written to the disks continuously.
Performance (Raid0)	RAID0is one larger volume with 2 or more hard disk drives. The data are written to the hard disk drives without any parity information. The total storage capacity is the sum of all hard disk drives.
Fault Tolerant (Raid1)	2 hard disk drives are required to create a RAID1 array. RAID1 can provide disk mirroring by duplicating the data between two hard disk drives.
Fault Tolerant (Raid5)	A minimum of 3 hard disk drives are required to create RAID5. The data are striped in all hard drives in a RAID5 array and the parity information is stored in each drive. If a hard disk drive fails, the array enters degraded mode. The data can be rebuilt from other member drives after installing a new drive to replace the failed one.
Fault Tolerant (Raid10)	Data are written in stripes across primary disks that have been mirrored to the secondary disks. A typical RAID 10 configuration consists of four drives, two for striping and two for mirroring

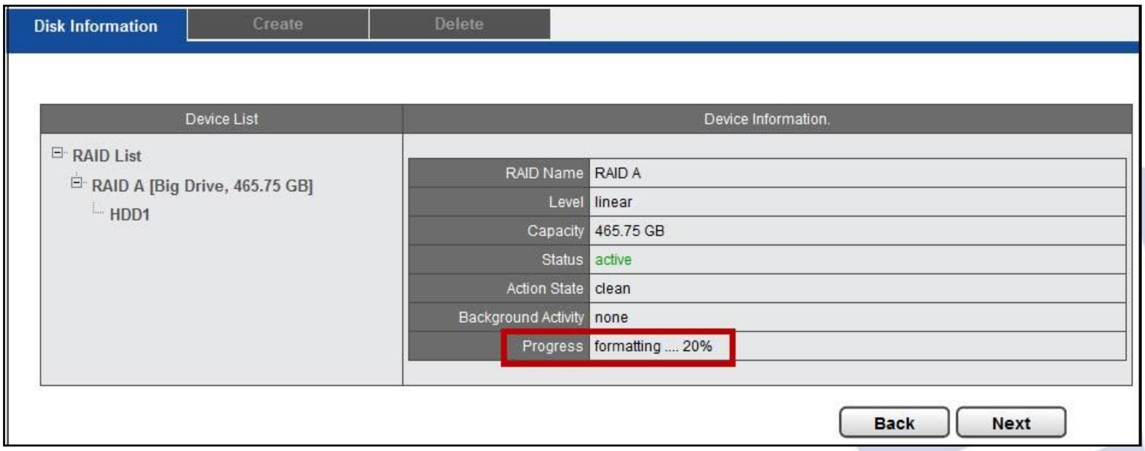
RAID 10 is supported in DS-8300-RM Pro+, DS-4300-RM Pro+, DS-4300 Pro+, DS-8200-RM Pro+, DS-4200-RM Pro+, DS-4200 Pro+, DS-8200-RM Pro, DS-4200-RM Pro and DS-4200 Pro Series.


Disk Management
Disk Information
Create
Delete
New RAID Disk
Free HDDs
5VX20DWX [931 GB]
>>
<<
Assigned HDDs
Target RAID Disk
○ Big Drive(Linear) [0 GB]
○ Fault Tolerant(Raid1) [0 GB]
○ Fault Tolerant(Raid10) [0 GB]
○ Performance(Raid0) [0 GB]
○ Fault Tolerant(Raid5) [0 GB]
RAID Modes
RAID-linear
DATA
Big Drive(Linear)
Connect all drives to from a big disk volume
RAID-0
DATA
Performance(Raid0)
Make disk volume with better performance
RAID-1
RAID-5
RAID-10
DATA
F
Tolerance(RAID-1/5/10)
Make disk volume with tolerance ability
F:Allow failed HDD(s)
Apply
Reset

Select a type of disk configuration, and please click "**Apply**" to execute building new RAID disk.

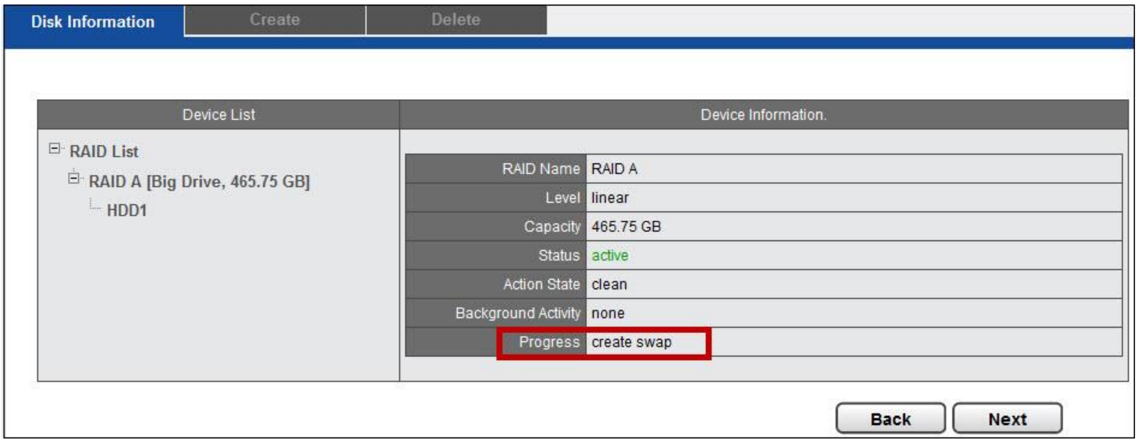
⚠ **Note**: Don't turn off the server or unplug any hard drives when RAID Disk is in building process.

Please wait. The disk configuration is in a process.


Disk Information
Create
Delete
Device List
Device Information.
RAID List
RAID A [Big Drive, 465.75 GB]
HDD1
Back
Next

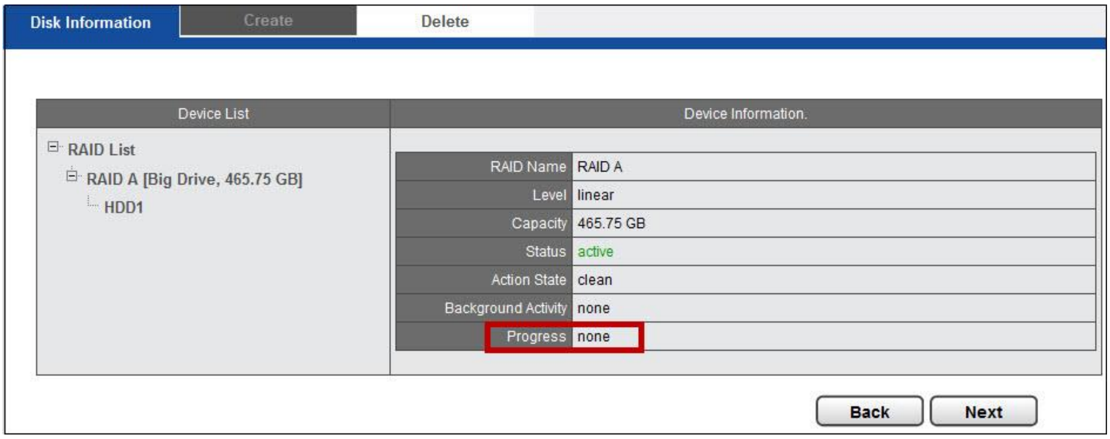
RAID Name	RAID A
Level	linear
Capacity	465.75 GB
Status	active
Action State	clean
Background Activity	none
Progress	formatting 20%

The progress is under "**formatting….20%**". Please wait till 100%.


Disk Information
Create
Delete
Device List
Device Information.
RAID List
RAID A [Big Drive, 465.75 GB]
HDD1
Back
Next

RAID Name	RAID A
Level	linear
Capacity	465.75 GB
Status	active
Action State	clean
Background Activity	none
Progress	create swap

The progress is in “**Create swap**” and is going to finish the disk building.


Disk Information
Create
Delete
Device List
Device Information.
RAID List
RAID A [Big Drive, 465.75 GB]
HDD1
Back
Next

RAID Name	RAID A
Level	linear
Capacity	465.75 GB
Status	active
Action State	clean
Background Activity	none
Progress	none

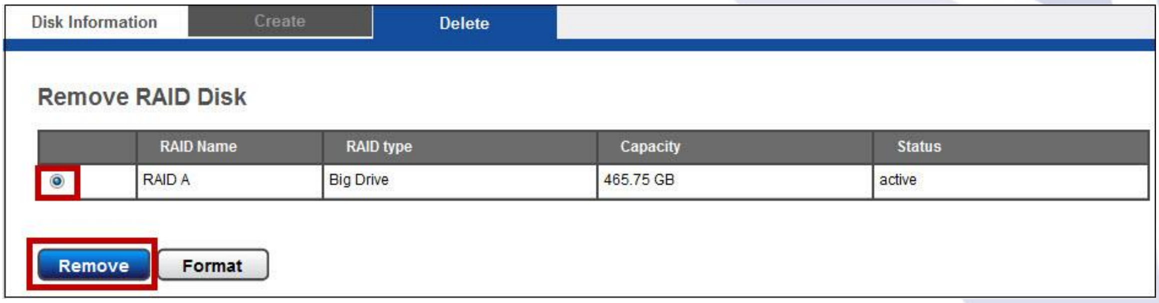
Finally, the RAID disk building is complete.

After the RAID disk is created, RAID List shows RAID Name and available storage devices. Device Information provides status of the hard drive: **RAID Name, Level, Capacity, Status-Active, Action State, Background Activity** and **Progress-none**.

3. Delete

After the RAID Disk is created, “**Delete**” option is available.

If user is going to delete RAID disk, please refer to following description.


Disk Information
Create
Delete
Remove
Format

Remove RAID Disk

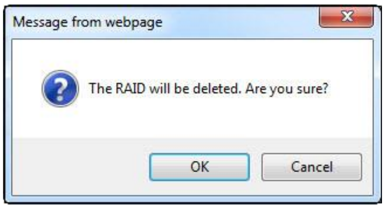
	RAID Name	RAID type	Capacity	Status
●	RAID A	Big Drive	465.75 GB	active

In “**Delete**” option, user can remove or format RAID disk by selecting the **RAID disk**.

In the table, **RAID Name, RAID type, Capacity** and **Status** are shown.

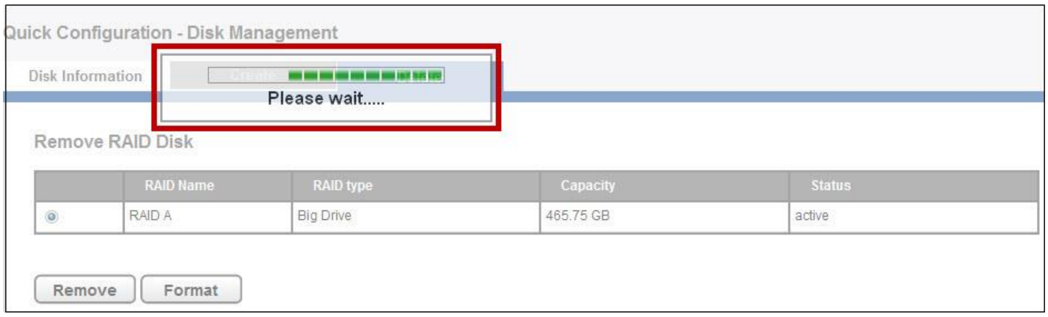
- **Remove**

Click “**Remove**” to delete RAID Disk. Once “**Remove**” is clicked, a window will pop up to ensure the execution.


Message from webpage

The RAID will be deleted. Are you sure?

To delete RAID Disk, click “**OK**” to proceed.


Quick Configuration - Disk Management

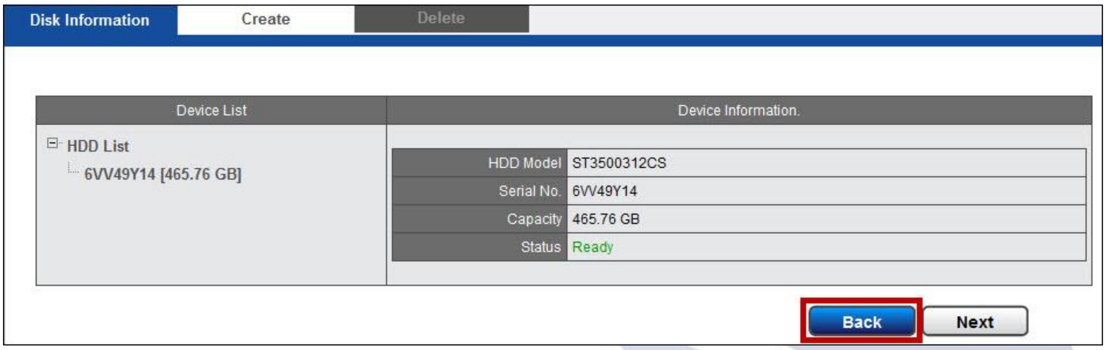
Disk Information

Please wait.....

Remove RAID Disk

	RAID Name	RAID type	Capacity	Status
○	RAID A	Big Drive	465.75 GB	active

Please wait. The deletion is in a process.



Device List	Device Information.
HDD List 6VV49Y14 [465.76 GB]	

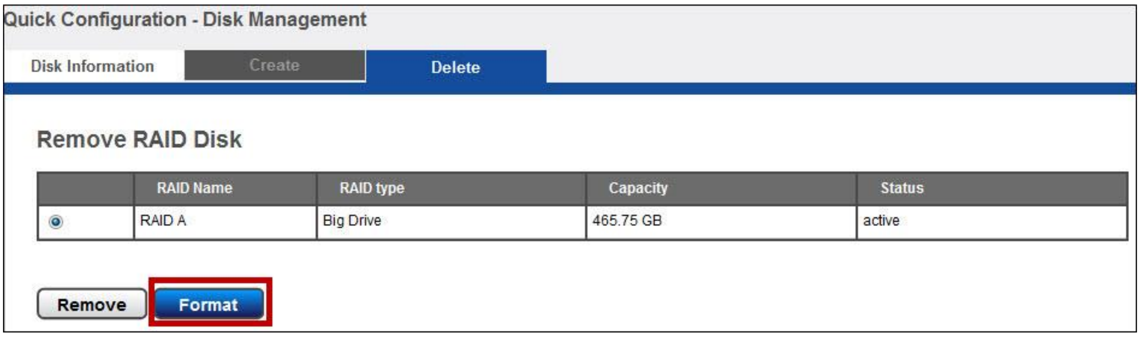
HDD Model	ST3500312CS
Serial No.	6VV49Y14
Capacity	465.76 GB
Status	Ready

If users want to change the RAID level setting, please click ‘‘Remove.’’ After the RAID Disk is removed, the Status in Device information shows “**Ready**,” then users can go back to Create page to continue the new RAID level configuration.

Note: Once you remove the disk and continually create it, the recorded video will be formatted.

- **Format**

Click “**Format**” to format the RAID disk, all recorded videos will be deleted.



Quick Configuration - Disk Management

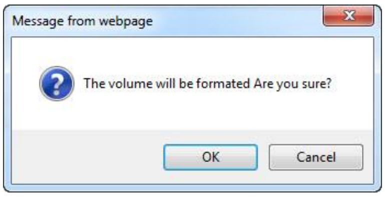
Disk Information
Create
Delete

Remove RAID Disk

	RAID Name	RAID type	Capacity	Status
●	RAID A	Big Drive	465.75 GB	active

Remove
Format

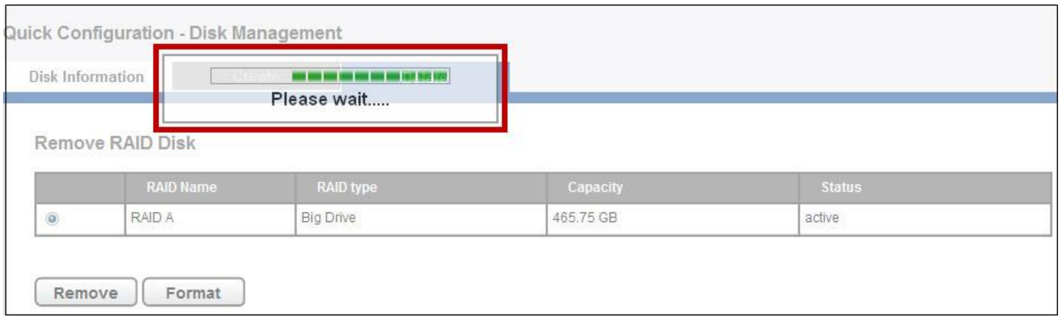
Once “**Format**” is clicked, a window will pop up to ensure the execution.



Message from webpage

The volume will be formated Are you sure?

To format RAID disk, click “**OK**” to continue.



Quick Configuration - Disk Management

Please wait.....

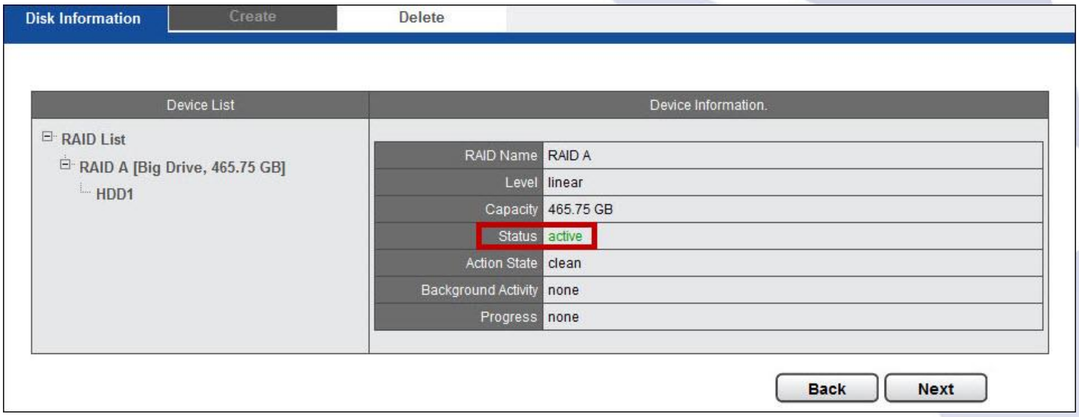
Remove RAID Disk

	RAID Name	RAID type	Capacity	Status
●	RAID A	Big Drive	465.75 GB	active

Disk Information
Create
Remove
Format

Hard disk drive is formatting.

Please wait for **formatting until 100%**.



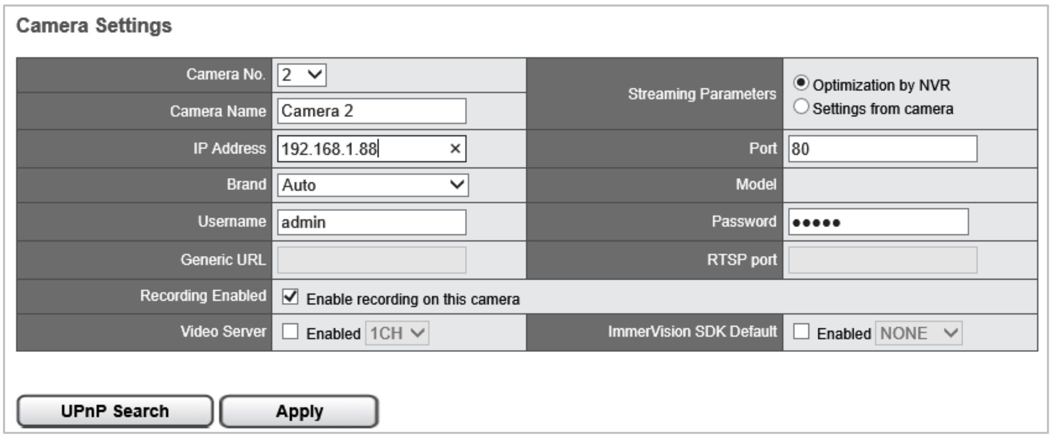
Disk Information
Create
Delete
Device List
RAID List
RAID A [Big Drive, 465.75 GB]
HDD1
Device Information.

RAID Name	RAID A
Level	linear
Capacity	465.75 GB
Status	active
Action State	clean
Background Activity	none
Progress	none

Back
Next

2.3.6 Camera Settings

NVR provides two options to add new cameras: **Detect** and **UPnP Search**



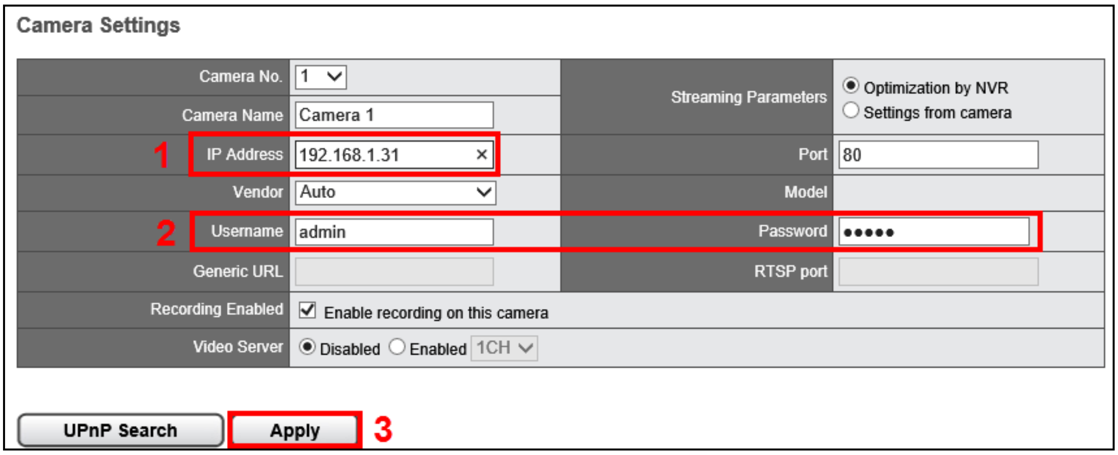
Camera Settings

Camera No. 2
Camera Name: Camera 2
IP Address: 192.168.1.88
Brand: Auto
Username: admin
Generic URL:
Recording Enabled: ☑ Enable recording on this camera
Video Server: ☐ Enabled 1CH
Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Model:
Password: •••••
RTSP port:
ImmerVision SDK Default: ☐ Enabled NONE

UPnP Search
Apply

[Method1] Detect:

In this option, users are asked to enter **IP Address.** Check correct **username** and **password**. Then, click “**Apply**” button to start adding camera.



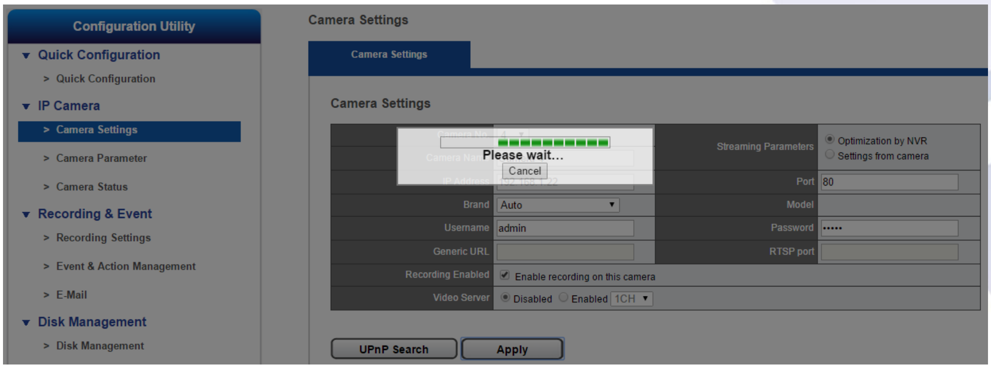
Camera Settings

Camera No. 1
Camera Name: Camera 1
IP Address: 192.168.1.31
Vendor: Auto
Username: admin
Generic URL:
Recording Enabled: ☑ Enable recording on this camera
Video Server: ● Disabled ○ Enabled 1CH
Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Model:
Password: •••••
RTSP port:

1
2
3
UPnP Search
Apply

After clicking “**Apply**” button, **vender**, **username and password** will be automatically filled in by vendor’s default information.

Please wait for NVR processing. You may click “**Cancel**” button to stop adding cameras.



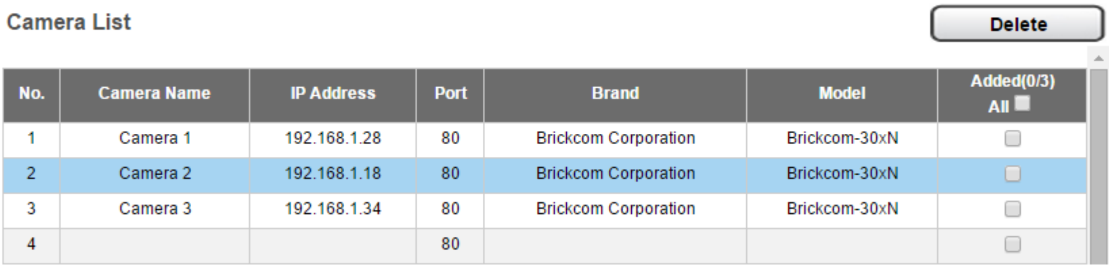
Camera Settings

Please wait…

Brand: Auto
Username: admin
Generic URL:
Recording Enabled: ☑ Enable recording on this camera
Video Server: ● Disabled ○ Enabled 1CH
Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Model:
Password: •••••
RTSP port:

Configuration Utility
Quick Configuration
> Quick Configuration
IP Camera
> Camera Settings
> Camera Parameter
> Camera Status
Recording & Event
> Recording Settings
> Event & Action Management
> E-Mail
Disk Management
> Disk Management
Camera Settings
Cancel
UPnP Search
Apply

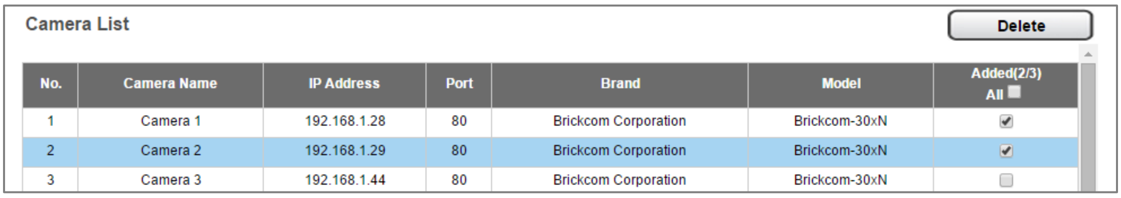
After successfully adding cameras, NVR will display camera information in camera list.



Camera List

No.	Camera Name	IP Address	Port	Brand	Model	Added(0/3) All ☐
1	Camera 1	192.168.1.28	80	Brickcom Corporation	Brickcom-30xN	☐
2	Camera 2	192.168.1.18	80	Brickcom Corporation	Brickcom-30xN	☐
3	Camera 3	192.168.1.34	80	Brickcom Corporation	Brickcom-30xN	☐
4			80			☐

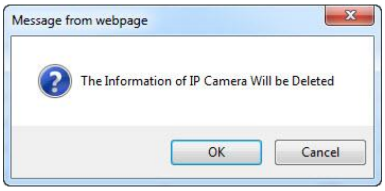
To delete camera, please click the check box and click “**Delete**” button. You can delete all cameras by clicking “**All**” check box.



Camera List

No.	Camera Name	IP Address	Port	Brand	Model	Added(2/3) All ☐
1	Camera 1	192.168.1.28	80	Brickcom Corporation	Brickcom-30xN	☑
2	Camera 2	192.168.1.29	80	Brickcom Corporation	Brickcom-30xN	☑
3	Camera 3	192.168.1.44	80	Brickcom Corporation	Brickcom-30xN	☐

A window will pop up to ensure the action.

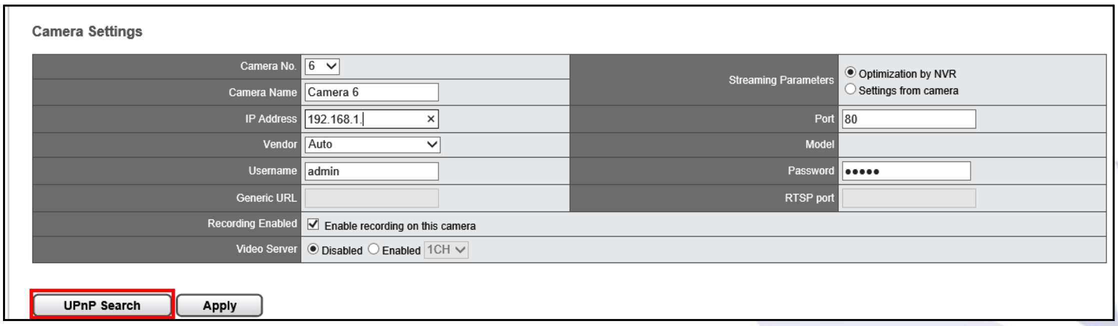


Message from webpage

The Information of IP Camera Will be Deleted

To delete the camera, click “**OK**” to proceed.

[Method2] UPnP Search:

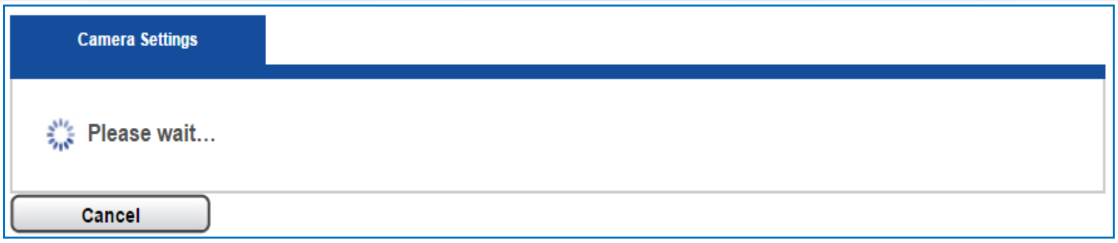


Camera Settings

Camera No.	6	Streaming Parameters	● Optimization by NVR ○ Settings from camera
Camera Name	Camera 6		
IP Address	192.168.1.	Port	80
Vendor	Auto	Model	
Username	admin	Password	•••••
Generic URL		RTSP port	
Recording Enabled	☑ Enable recording on this camera		
Video Server	● Disabled ○ Enabled 1CH		

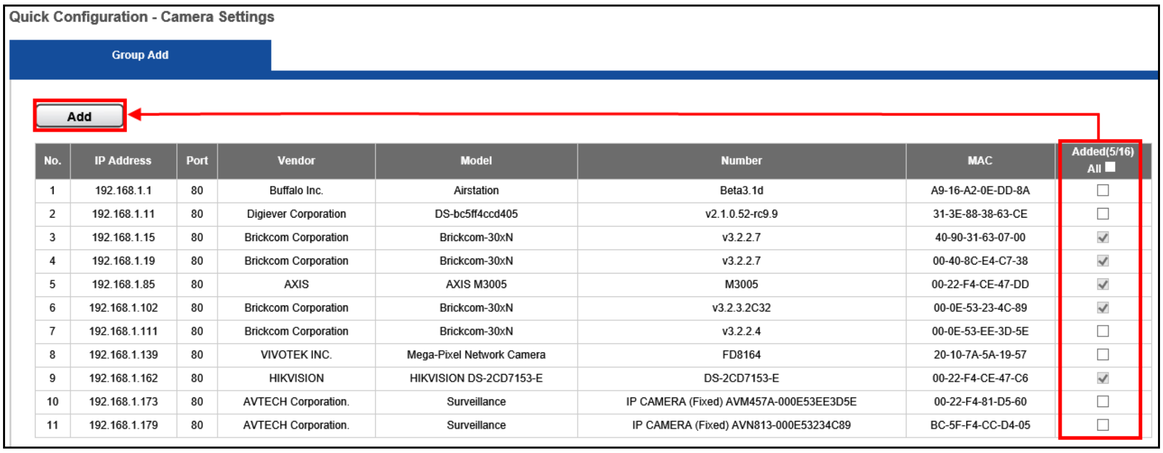
Click “**UPnPSearch**” to find out UPnP devices within the LAN.

- ⚠ Please make sure IP camera supports UPnP Search function.
- ⚠ Please go to IP Camera web page to enable UPnP search function.



Please wait. The UPnP search is in a process. You may click “**Cancel**” button to stop search device.

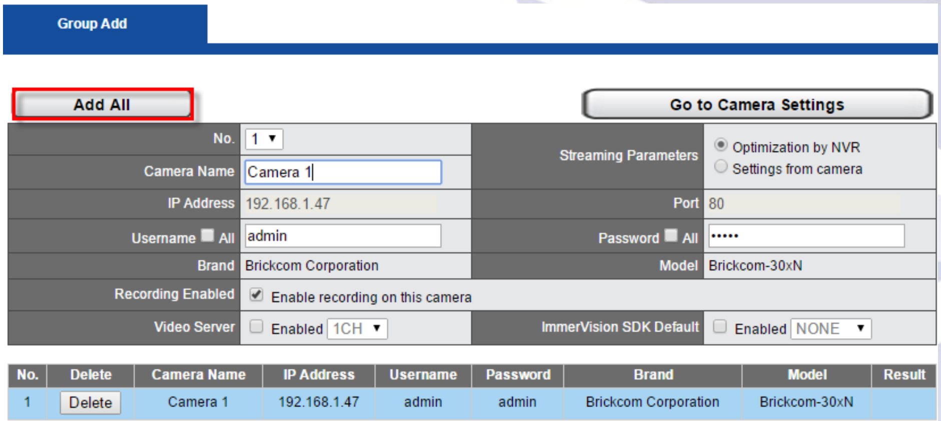
The available cameras in the network will be displayed as below.
Click the camera that you would like to add in NVR, then click “**Add**” button.



No.	IP Address	Port	Vendor	Model	Number	MAC	Added(5/16) All ☐
1	192.168.1.1	80	Buffalo Inc.	Airstation	Beta3.1d	A9-16-A2-0E-DD-8A	☐
2	192.168.1.11	80	Digiever Corporation	DS-bc5ff4ccd405	v2.1.0.52-rc9.9	31-3E-88-38-63-CE	☐
3	192.168.1.15	80	Brickcom Corporation	Brickcom-30xN	v3.2.2.7	40-90-31-63-07-00	☑
4	192.168.1.19	80	Brickcom Corporation	Brickcom-30xN	v3.2.2.7	00-40-8C-E4-C7-38	☑
5	192.168.1.85	80	AXIS	AXIS M3005	M3005	00-22-F4-CE-47-DD	☑
6	192.168.1.102	80	Brickcom Corporation	Brickcom-30xN	v3.2.3.2C32	00-0E-53-23-4C-89	☑
7	192.168.1.111	80	Brickcom Corporation	Brickcom-30xN	v3.2.2.4	00-0E-53-EE-3D-5E	☐
8	192.168.1.139	80	VIVOTEK INC.	Mega-Pixel Network Camera	FD8164	20-10-7A-5A-19-57	☐
9	192.168.1.162	80	HIKVISION	HIKVISION DS-2CD7153-E	DS-2CD7153-E	00-22-F4-CE-47-C6	☑
10	192.168.1.173	80	AVTECH Corporation.	Surveillance	IP CAMERA (Fixed) AVM457A-000E53EE3D5E	00-22-F4-81-D5-60	☐
11	192.168.1.179	80	AVTECH Corporation.	Surveillance	IP CAMERA (Fixed) AVN813-000E53234C89	BC-5F-F4-CC-D4-05	☐

Note: Users can click “**All**” to add cameras in Added column.
Note: The Added column will show two numbers to display the total channels of the NVR and the channel numbers that has been already added in the NVR.

Please check camera information in Group add page. Then, Click “**Add All**” button to start adding cameras.

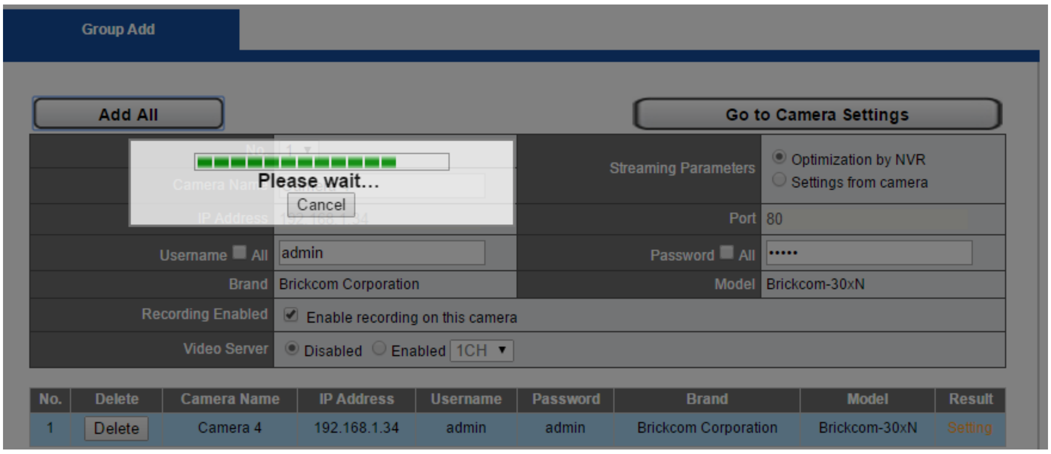


No.	1 ▾	Streaming Parameters	● Optimization by NVR ○ Settings from camera
Camera Name	Camera 1		
IP Address	192.168.1.47	Port	80
Username ☐ All	admin	Password ☐ All	•••••
Brand	Brickcom Corporation	Model	Brickcom-30xN
Recording Enabled	☑ Enable recording on this camera		
Video Server	☐ Enabled 1CH ▾	ImmerVision SDK Default	☐ Enabled NONE ▾

No.	Delete	Camera Name	IP Address	Username	Password	Brand	Model	Result
1	Delete	Camera 1	192.168.1.47	admin	admin	Brickcom Corporation	Brickcom-30xN	

Note: NVR will automatically fill in default **username and password** of each vendor. **Camera No., Camera Name**, **User Name** and **Password** can be modified by users.

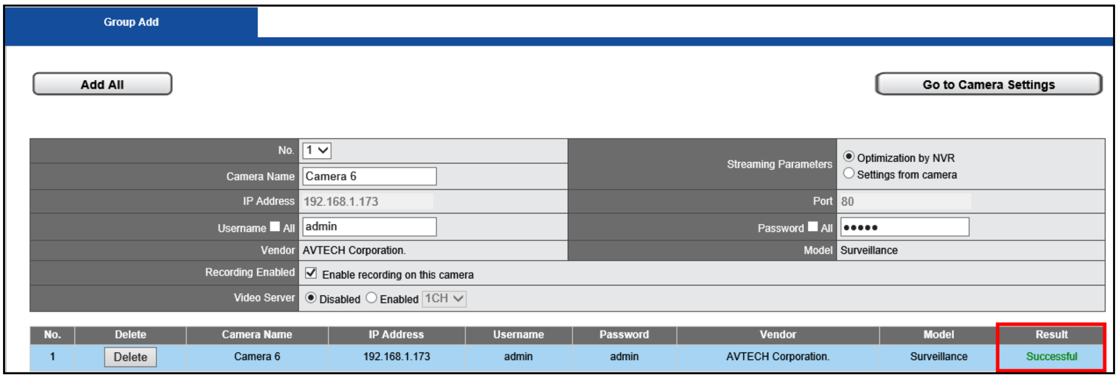
You may click "**Cancel**" button to stop camera adding progress.



Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Username ☐ All: admin
Password ☐ All: •••••
Brand: Brickcom Corporation
Model: Brickcom-30xN
Recording Enabled: ☑ Enable recording on this camera
Video Server: ● Disabled ○ Enabled 1CH

No.	Delete	Camera Name	IP Address	Username	Password	Brand	Model	Result
1	Delete	Camera 4	192.168.1.34	admin	admin	Brickcom Corporation	Brickcom-30xN	Setting

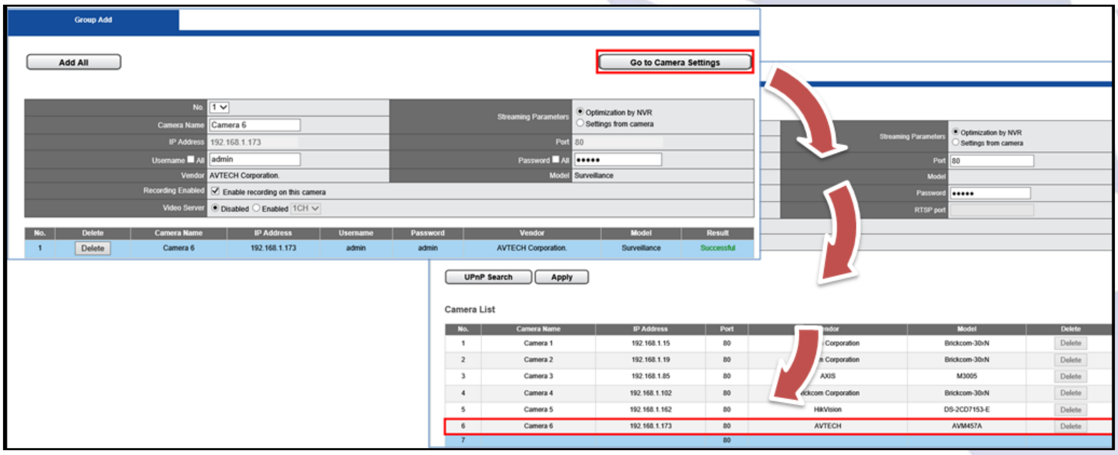
Status column in camera list will display "**Successful**" when cameras are successfully added in NVR.



No.: 1
Camera Name: Camera 6
IP Address: 192.168.1.173
Username ☐ All: admin
Vendor: AVTECH Corporation.
Recording Enabled: ☑ Enable recording on this camera
Video Server: ● Disabled ○ Enabled 1CH
Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Password ☐ All: •••••
Model: Surveillance

No.	Delete	Camera Name	IP Address	Username	Password	Vendor	Model	Result
1	Delete	Camera 6	192.168.1.173	admin	admin	AVTECH Corporation.	Surveillance	Successful

Please click **"Go to Camera Settings"** button to check all camera information camera list that is successfully added in NVR.



Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Model:
Password: •••••
RTSP port:

Camera List

No.	Camera Name	IP Address	Port	ndor	Model	Delete
1	Camera 1	192.168.1.15	80	Corporation	Brickcom-30xN	Delete
2	Camera 2	192.168.1.19	80	n Corporation	Brickcom-30xN	Delete
3	Camera 3	192.168.1.85	80	AXIS	M3005	Delete
4	Camera 4	192.168.1.102	80	ickcom Corporation	Brickcom-30xN	Delete
5	Camera 5	192.168.1.162	80	HikVision	DS-2CD7153-E	Delete
6	Camera 6	192.168.1.173	80	AVTECH	AVM457A	Delete
7			80			

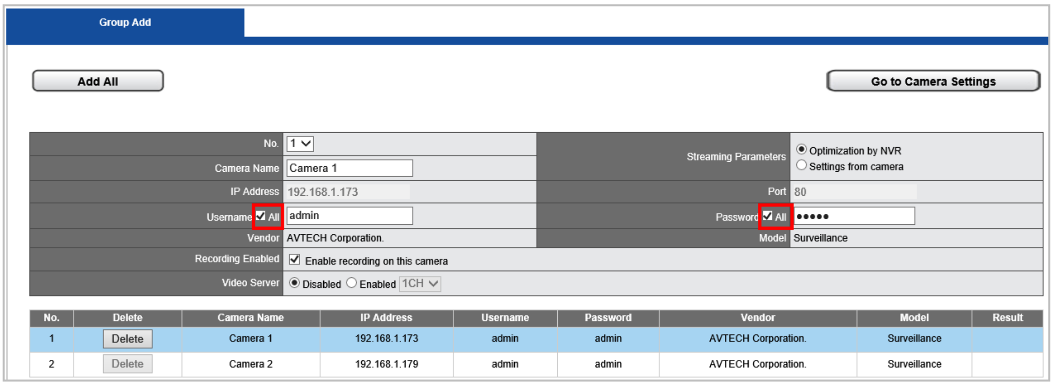
The Description of Camera Settings:

(1) Memorize modified username and password:

NVR can memorize username and password which is modified by users after users click “**Apply**” button. Then, the default username and password of that vendor will be replaced by the modified one. Next time when users add new camera of the specific vendor, username and password will be automatically filled in by new modified one.

⚠ **Note:** Each vendor has its own default username and password.

⚠ **Note:** When using **UPnP Search** to add cameras, NVR designs “**All**” option beside Username and Password to memorize modified username and password of that camera brand.

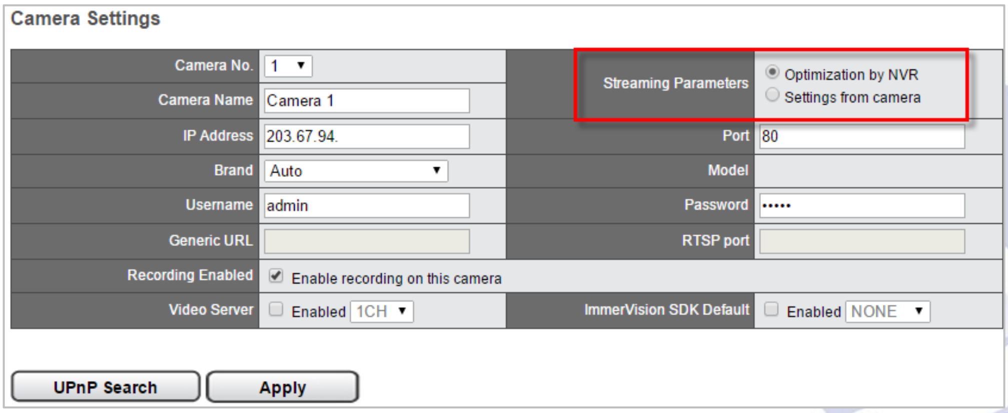


No. 1
Camera Name Camera 1
IP Address 192.168.1.173
Username ☑ All admin
Vendor AVTECH Corporation.
Recording Enabled ☑ Enable recording on this camera
Video Server ● Disabled ○ Enabled 1CH
Streaming Parameters ● Optimization by NVR ○ Settings from camera
Port 80
Password ☑ All •••••
Model Surveillance

No.	Delete	Camera Name	IP Address	Username	Password	Vendor	Model	Result
1	Delete	Camera 1	192.168.1.173	admin	admin	AVTECH Corporation.	Surveillance	
2	Delete	Camera 2	192.168.1.179	admin	admin	AVTECH Corporation.	Surveillance	

As above example, NVR will modify default username and password of AVTECH camera and make the new username and password become AVTECH’s default username and password.

(2) Streaming Parameters



Camera No. 1
Camera Name Camera 1
IP Address 203.67.94.
Brand Auto
Username admin
Generic URL
Recording Enabled ☑ Enable recording on this camera
Video Server ☐ Enabled 1CH
Streaming Parameters ● Optimization by NVR ○ Settings from camera
Port 80
Model
Password •••••
RTSP port
ImmerVision SDK Default ☐ Enabled NONE

NVR provides two options to set up stream parameters: **Optimization by NVR** and **Settings from camera**.

⚠ **Note: Streaming Parameters** will not be applied when users change **Camera Name/ Username/ Password/ Recording Enabled**. This feature is designed for cameras that have been added to NVR so that camera parameter remains the same.

① **Optimization by NVR**

By selecting this option, NVR will optimize camera settings to execute the best surveillance performance.

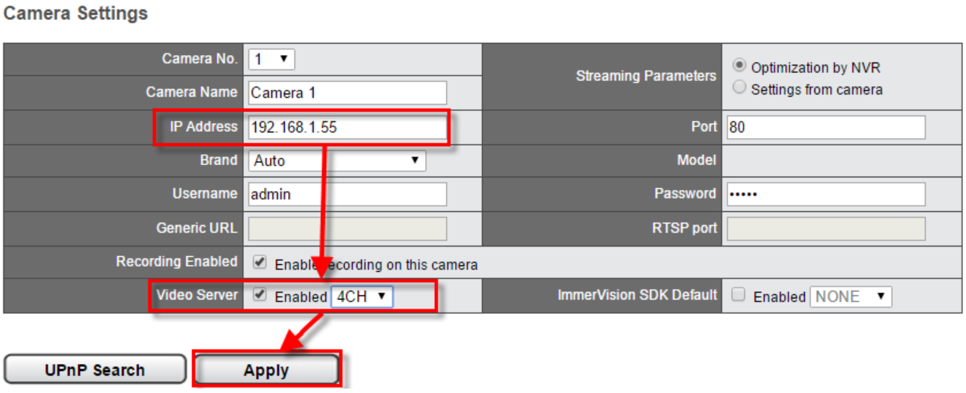
② **Settings from camera**

If users have already set up camera settings from camera webpage, NVR can adopt camera setting by selecting "Setting from Camera." This option can largely save users' time and effort when users install surveillance systems.

⚠ **Note:** It is highly recommend to use "**Optimization by NVR**" to perform the best surveillance quality in both live-view and playback.

(3) Multi-channel Video Server

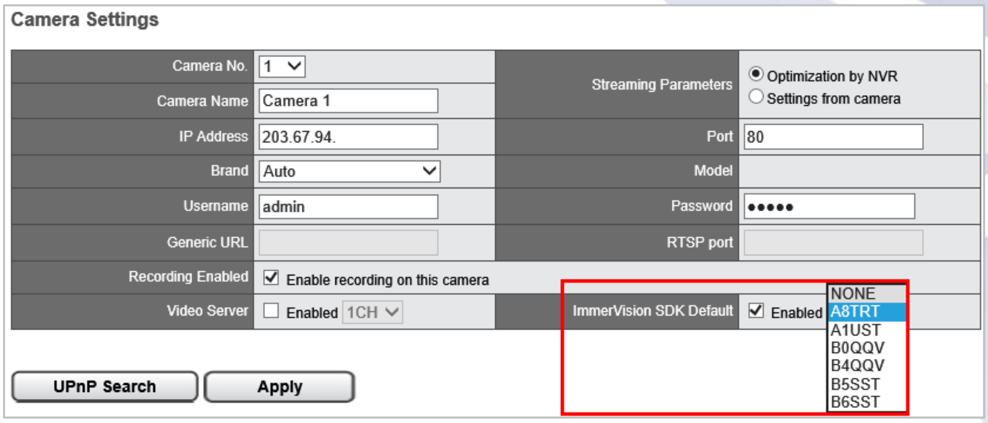
NVR supports multi-channel video server to connect analog cameras to NVR. Users are asked to enter **IP Address.** Please check correct **username** and **password**. Click **"Enable" Video Server** and choose the channel number. Then, click "**Apply**" button.



Camera No.: 1
Camera Name: Camera 1
IP Address: 192.168.1.55
Brand: Auto
Username: admin
Generic URL:
Recording Enabled: ☑ Enable recording on this camera
Video Server: ☑ Enabled 4CH
Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Model:
Password: •••••
RTSP port:
ImmerVision SDK Default: ☐ Enabled NONE

(4) ImmerVision SDK Default

For ImmerVision 360-degree cameras, NVR allows users to pre-define suitable ImmerVision dewarping engine from six main SDK in advance with no need to remember ImmerVision SDK type.

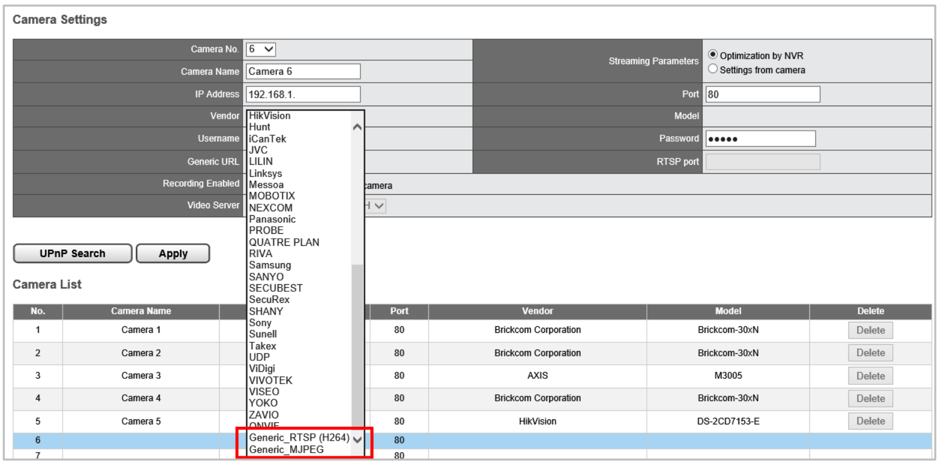


Camera No.: 1
Camera Name: Camera 1
IP Address: 203.67.94.
Brand: Auto
Username: admin
Generic URL:
Recording Enabled: ☑ Enable recording on this camera
Video Server: ☐ Enabled 1CH
Streaming Parameters: ● Optimization by NVR ○ Settings from camera
Port: 80
Model:
Password: ●●●●●
RTSP port:
ImmerVision SDK Default: ☑ Enabled A8TRT

(5) Generic RTSP/ Generic MJPEG (for Detect method only)

NVR allows user to enter RTSP/ MJPEG URLs of IP cameras to receive the video streaming from IP camera. The streaming will be applied to monitoring, recording and playback.

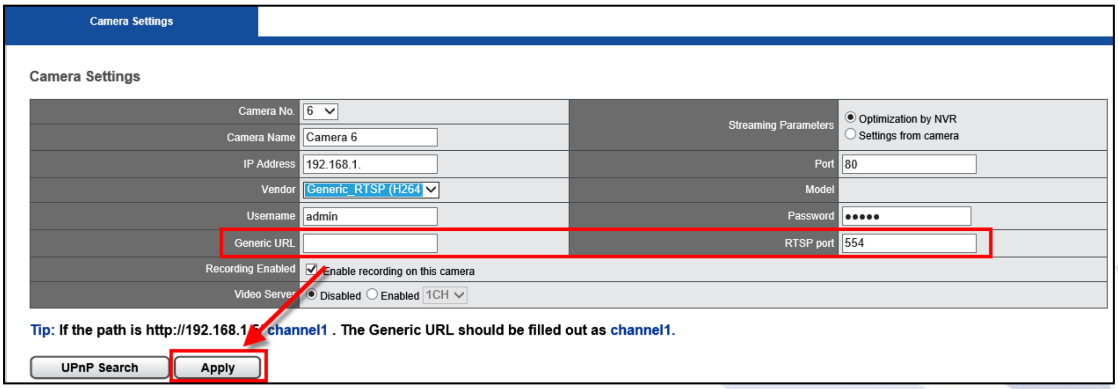
Generic RTSP and **Generic MJPEG** function can be selected in the vendor list of camera setting page.


Camera Settings
HikVision
Hunt
iCanTek
JVC
LILIN
Linksys
Messoa
MOBOTIX
NEXCOM
Panasonic
PROBE
QUATRE PLAN
RIVA
Samsung
SANYO
SECUBEST
SecuRex
SHANY
Sony
Sunell
Takex
UDP
ViDigi
VIVOTEK
VISEO
YOKO
ZAVIO
ONVIF
Generic_RTSP (H264)
Generic_MJPEG
UPnP Search
Apply
Camera List

Camera No. 6
Camera Name Camera 6
IP Address 192.168.1.
Streaming Parameters ● Optimization by NVR ○ Settings from camera
Port 80
Password ●●●●●

No.	Camera Name	Port	Vendor	Model	Delete
1	Camera 1	80	Brickcom Corporation	Brickcom-30xN	Delete
2	Camera 2	80	Brickcom Corporation	Brickcom-30xN	Delete
3	Camera 3	80	AXIS	M3005	Delete
4	Camera 4	80	Brickcom Corporation	Brickcom-30xN	Delete
5	Camera 5	80	HikVision	DS-2CD7153-E	Delete
6		80			
7		80			

Please enter proper **Generic URLs** when selecting Generic URL/Generic MJPEG,
If Generic RTSP is selected, RTSP port should be filled out too.
Click “**Apply**” button to make parameters enable.


Camera Settings
UPnP Search
Apply

Camera Settings

Camera No. 6
Camera Name Camera 6
IP Address 192.168.1.
Vendor Generic_RTSP (H264
Username admin
Generic URL
Recording Enabled ☑ Enable recording on this camera
Video Server ● Disabled ○ Enabled 1CH
Streaming Parameters ● Optimization by NVR ○ Settings from camera
Port 80
Model
Password ●●●●●
RTSP port 554

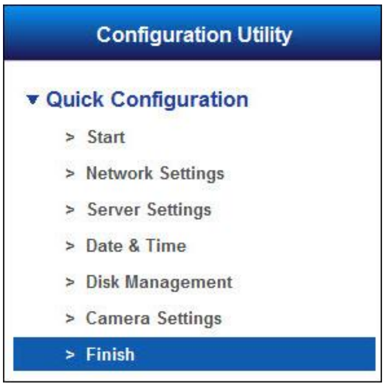
Tip: If the path is http://192.168.1.5/channel1 . The Generic URL should be filled out as channel1.

⚠The most correct URLs should be provided from each camera vendors.
⚠Users may also refer to websites

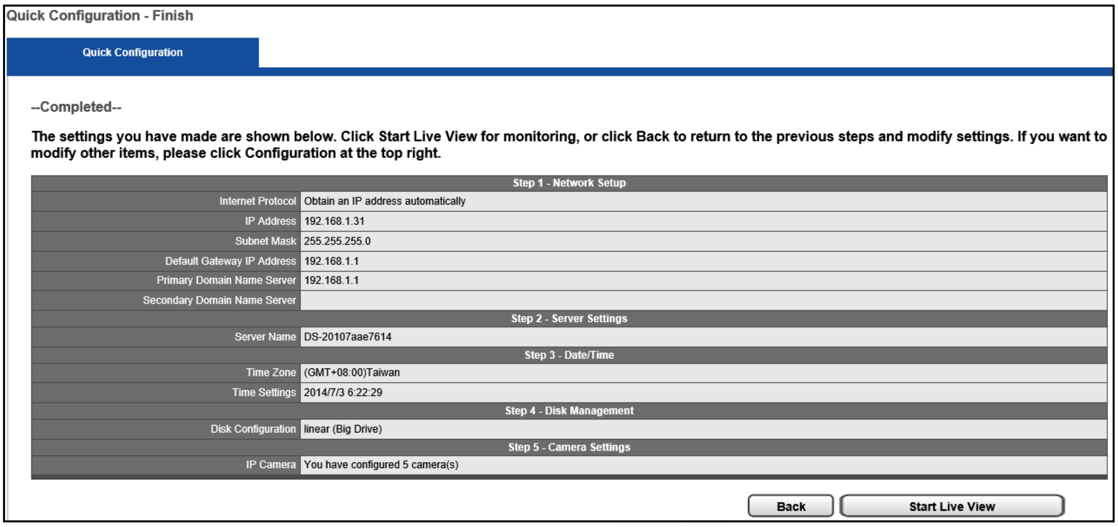
- https://www.soleratec.com/rtsp/
- http://www.ispyconnect.com/sources.aspx

2.3.7 Finish

Please select “**Finish**” from the drop-down menu of **Configuration Utility** to begin.


Configuration Utility
▾ Quick Configuration
> Start
> Network Settings
> Server Settings
> Date & Time
> Disk Management
> Camera Settings
> Finish

Once five steps of Quick Configuration are completed, the window will show the completed status. You can click “**Back**” to return to the previous steps to modify the configuration or click “**Start Live view**” to start monitoring.


Quick Configuration - Finish
Quick Configuration

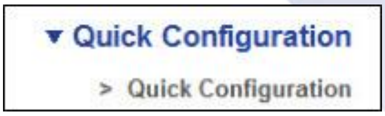
--Completed--

The settings you have made are shown below. Click Start Live View for monitoring, or click Back to return to the previous steps and modify settings. If you want to modify other items, please click Configuration at the top right.

Step 1 - Network Setup	
Internet Protocol	Obtain an IP address automatically
IP Address	192.168.1.31
Subnet Mask	255.255.255.0
Default Gateway IP Address	192.168.1.1
Primary Domain Name Server	192.168.1.1
Secondary Domain Name Server	
Step 2 - Server Settings	
Server Name	DS-20107aae7614
Step 3 - Date/Time	
Time Zone	(GMT+08:00)Taiwan
Time Settings	2014/7/3 6:22:29
Step 4 - Disk Management	
Disk Configuration	linear (Big Drive)
Step 5 - Camera Settings	
IP Camera	You have configured 5 camera(s)

Back
Start Live View

To review the setting or information of Quick Configuration, user can also select “**Quick Configuration**” in the left of the Configuration main page.


▾ Quick Configuration
> Quick Configuration

Chapter 3. Use NVR by Local Display

NVR can be connected to a monitor via HDMI/VGA/DVI-I port to execute quick configuration and display live view.

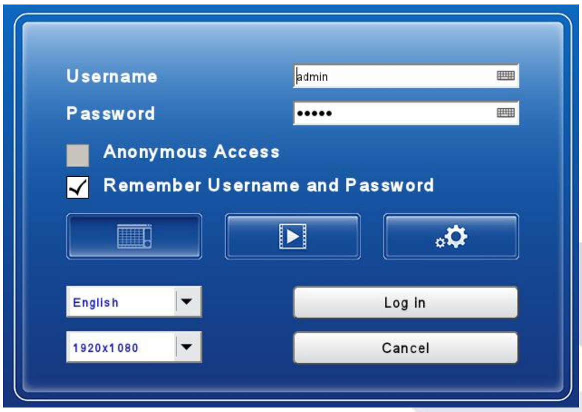
⚠ **Note**: Local display feature is supported in Pro and Pro+ series.

To start local display, please check the steps below:

1. Please install at least one hard disk drive in your NVR.
2. Connect NVR and IP cameras to the network.
3. Make sure the monitor is connected to the port (HDMI /VGA/ DVI-I) of NVR rear panel.
4. Please connect a USB mouse to the USB port of NVR.
5. Please connect power cord and connector to turn on NVR.
6. When you enter the log in interface of NVR, please enter default user name "**admin**" and password "**admin**" and select languages.

3.1 Log in NVR

You have to key in the correct username and password to login NVR.



Username admin

Password •••••

☐ Anonymous Access

☑ Remember Username and Password

English

1920x1080

Resolution:

User can select the resolution 1920x1080 or 1024x768 in login page, when the monitor supports both types of resolution.

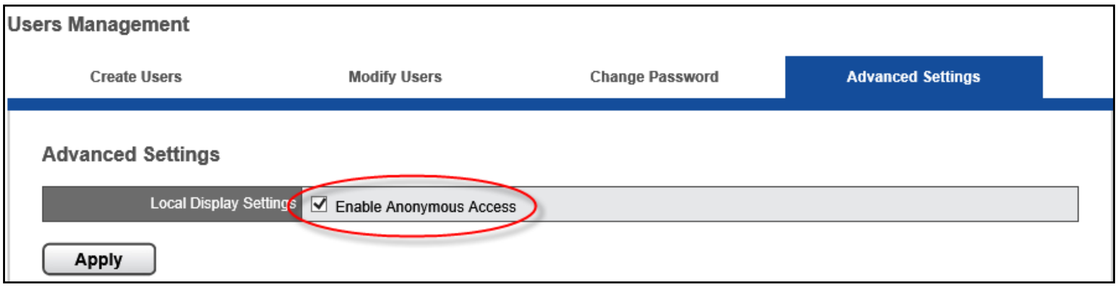
3.1.1 Anonymous login

Anonymous login allows users to login without username and password. Anonymous user can only view live monitoring and playback page in local monitor, however, the configuration page will be disable. While anonymous login is applied, system will automatically log in without authorization process after boot up.

Start to setup the anonymous login

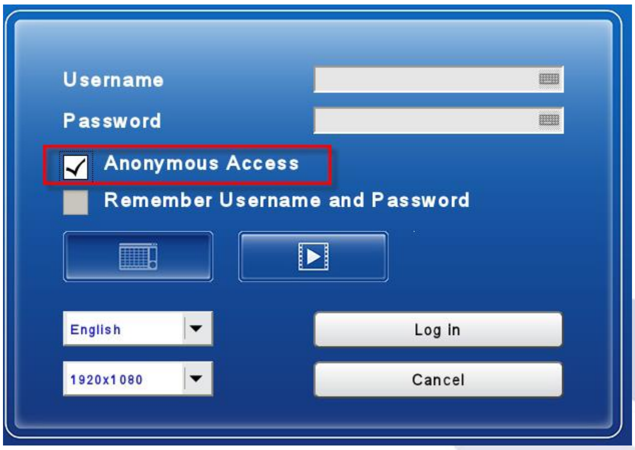
A. Please go to “Configuration->Management->Users Management->Advance Settings”

B. Check the “Enable Anonymous Access.”


Users Management
Create Users
Modify Users
Change Password
Advanced Settings
Advanced Settings
Apply

Local Display Settings ☑ Enable Anonymous Access

C. Enable the “Anonymous” at the local display login page, and then log in.


Username
Password
Log In
Cancel

☑ Anonymous Access

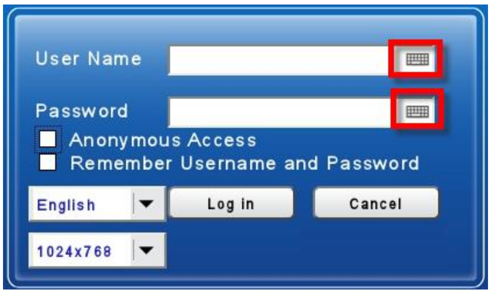
☐ Remember Username and Password

English

1920x1080

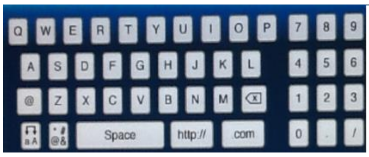
3.1.2 Virtual Keyboard

Users can choose to use USB keyboard for typing in local display of NVR, or fill out columns with virtual keyboard. The virtual keyboard in local display can be enabled from the right side of each column.

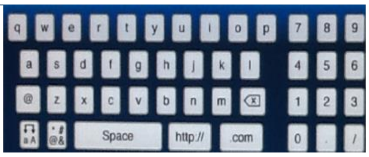

User Name
Password
Anonymous Access
Remember Username and Password
English
Log in
Cancel
1024x768

There are 3 types of virtual keyboard can be chosen, including Upper case, Lower case and Symbols.

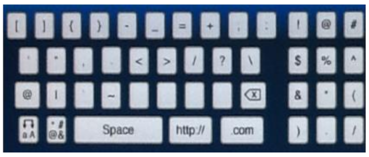
-Upper case


Q W E R T Y U I O P 7 8 9
A S D F G H J K L 4 5 6
@ Z X C V B N M 1 2 3
Space http:// .com 0

-Lower case

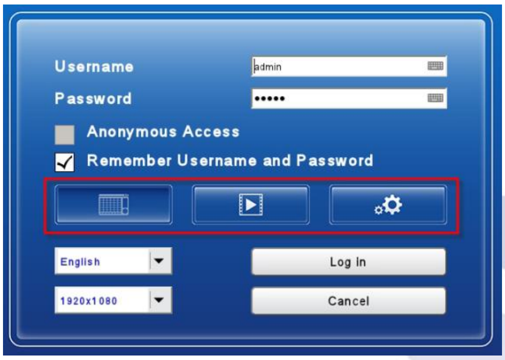

q w e r t y u i o p 7 8 9
a s d f g h j k l 4 5 6
@ z x c v b n m 1 2 3
Space http:// .com 0

-Symbols


[ ] { } - _ = + ! @ #
< > / ? \ $ % ^
& * (
Space http:// .com)

3.1.3 Selectable Login Entry

Selectable Login Entrance enables user to directly access desired interface among liveview, playback and configuration page.


Username
admin
Password
•••••
Anonymous Access
Remember Username and Password
English
Log in
1920x1080
Cancel

Icon	Description
▦	**Liveview**: Click “**Liveview**” to control the monitoring instantaneously.
▶	**Playback**: Click “**Playback**” to play recorded video files.
⚙	**Configuration**: Click “**Configuration**” to configure camera, recording, event, management, network, quick configuration and system.

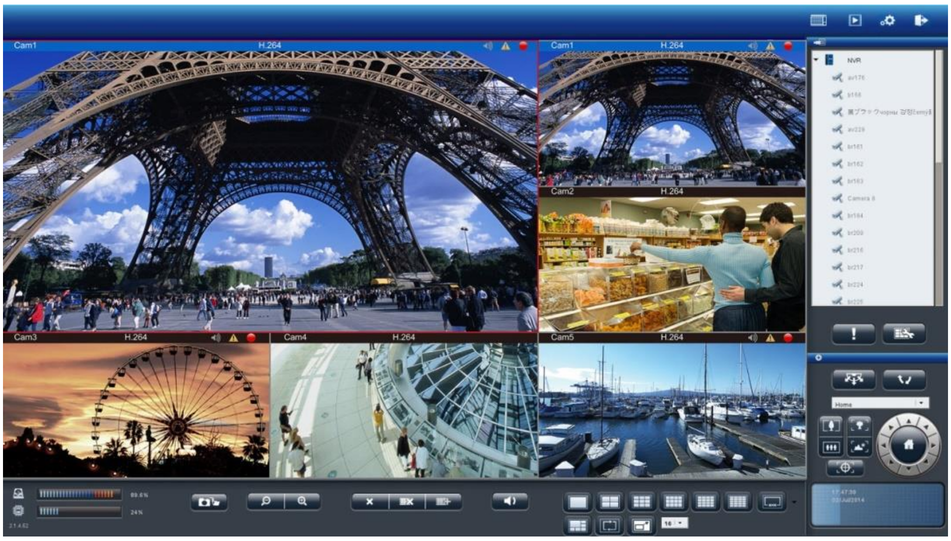
3.2 Quick Configuration

After you log in local display of NVR, the system will direct you to set Quick Configuration in five main steps. Follow the instructions of the Overview of wizard to complete the system setup. For further information, please refer to chapter **2.3 Quick Configuration.**

3.3 Liveview

After the Quick Configuration is complete, users can successfully monitor IP cameras. In live view page, users can monitor cameras in various display modes and control PTZ cameras.

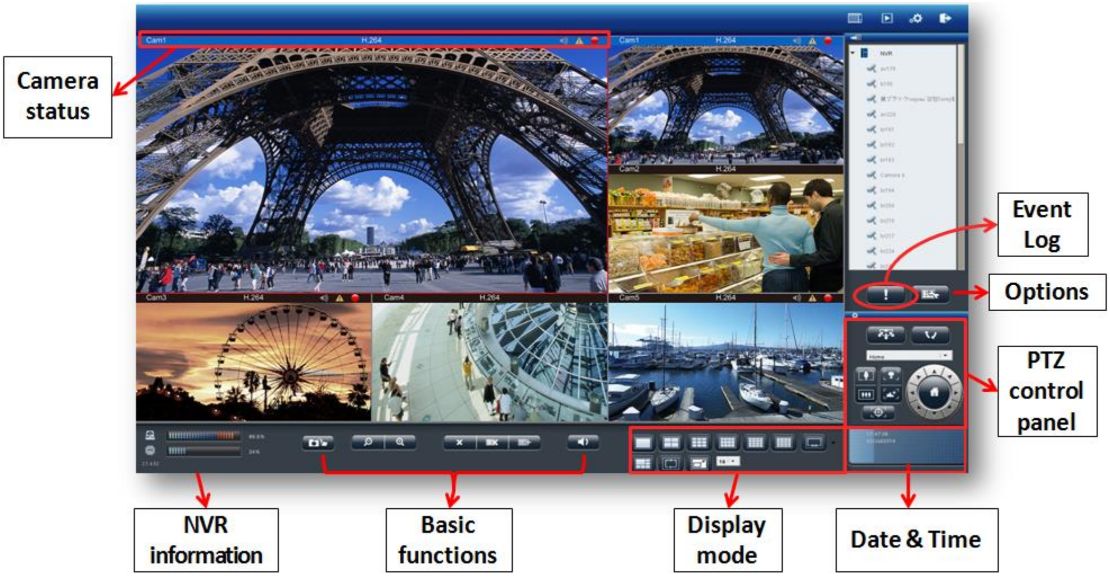
3.3.1 Select View Modes on Liveview Page



On top right of live view, users can select four view modes.

Mode	Description
▦	**Liveview**: Click “**Liveview**” to control the monitoring instantaneously.
▶	**Playback**: Click “**Playback**” to play and to export the recorded video files.
⚙	**Configuration**: Click “**Configuration**” to configure camera, recording, event, management, network, quick configuration and system.
➜	**Logout**: Click "**Logout**" to leave NVR.

3.3.2 Main Functions of Liveview


Camera status
Event Log
Options
PTZ control panel
NVR information
Basic functions
Display mode
Date & Time

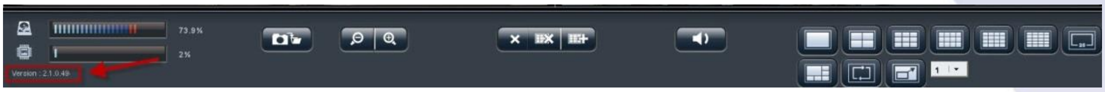
1. Camera status

Icon	Description
cam3	**Camera name**: The name of the camera is located in the top left corner in each video window. Users can rename the camera via the path "Configuration->IP Camera->Camera Settings."
H264	**Video compression format**: M-JPEG/MPEG-4/H.264
🔈	**Audio**: Once camera supports audio, NVR shows audio in blue. Vice versa, NVR shows audio in grey.
⚠	**Event**: When event happens, NVR shows warning to user for instant alert.
●	**Recording status**: The window shows whether camera is recording or not.
	Blue border: The outline border surrounds the selected window to highlight the focus image.

2. NVR information

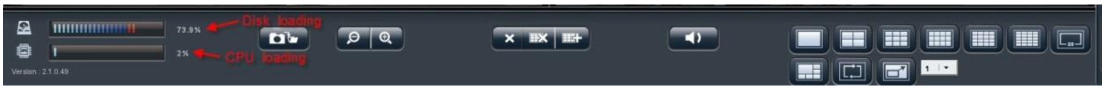
(1) Firmware version

User can easily find out the firmware version in the live view page.

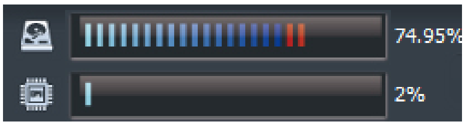

73.9%
2%
Version : 2.1.0.49

(2) Disk and CPU loading indicator:

Users can find out Disk and CPU loading directly without entering configuration page.



Disk and CPU loading indicator shows blue when loading is 70% or under, and shows red as a warning when it reach to more than 70%.



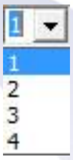
With changing the video configuration, like resolution, FPS and video quality or changing RAID type, can influence the CPU loading, and users can easily find the best balance in NVR.

3. Basic functions

Icon	Description
📷	**Snapshot:** Take a snapshot on the camera that you select. The snapshot will be saved in "Public ->liveview_snapshot." It can be access through **Windows Networking** or **FTP service** at File Sharing service in Configuration page.
🔍 | 🔍	**Digital zoom in/ out:** Select a channel to enable digital zoom function
✕	**Drop**: Drop the camera from monitoring.
▦✕	**Drop all**: Drop all cameras from monitoring.
▦+	**Add all**: Add all cameras from monitoring.
🔈	**Mute:** Alter sound instrument from camera.
16:50:05 06/Nov/2013	**Date & Time:** Showthe specific day and time.

4. Display mode

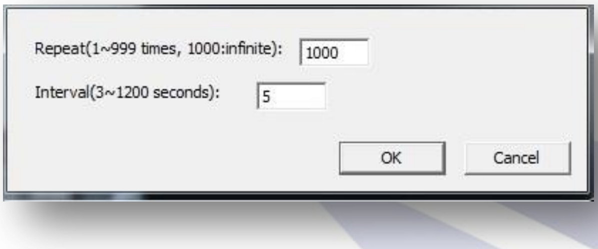
NVR supports multi-display modes for monitoring. Click the icon of display mode to monitor live view. When you click a display mode, the mode icons will turn into blue.

Icon	Description
	1 screen
	4 screen
	9 screen
	12 screen
	16 screen
	20 screen
25	3/5/25/30/36/42/49/56/64 screen
	5+1 screen
	8 screen
	10 screen
	12+1 screem
	Full Screen
	Sequential mode  Click 1 ▾ to choose the page of liveview .

5. PTZ Control Panel

If the IP camera supports PTZ function, user can use the control panel or joystick to adjust the viewing angle. The following functions are available depending on the camera models.

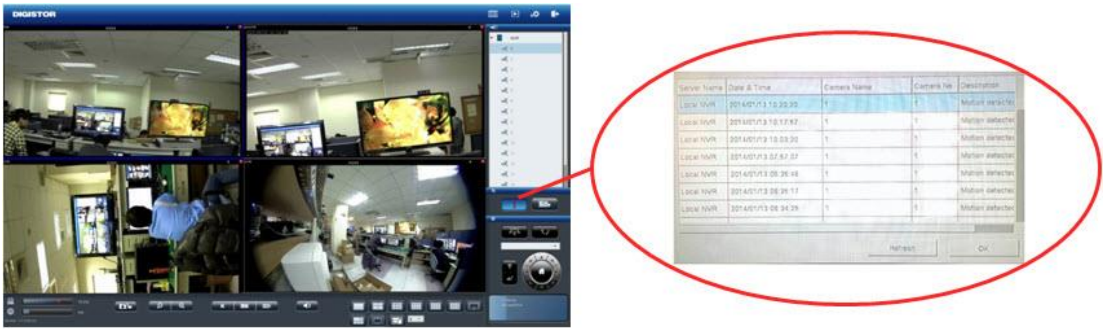
⚠ **Note:** Please check the compatible list before using joystick to adjust PTZ cameras.

Icon	Description
	PTZ panel: PTZ allows users to monitor large areas with a single network camera. Pan, tilt, and zoom functions can be controlled remotely by users. If device supports PTZ control, users can click on the arrows to pan and/ or tilt the camera. The house in the middle can take you back to original monitoring position.
	Preset positions: Select the preset positions which are defined in PTZ camera and the camera will move to the position that user selects.
	Optical zoom in/ out: If camera supports optical zoom in/ out, users can adjust PTZ camera to zoom out or zoom in.
	Focus near / far: If camera supports PTZ control, users can adjust the focus of the PTZ camera to focus near or focus far.
	Auto Focus: To automatically focuses the camera lens on a subject.
	Schedule for PTZ: Select "**Set**" to set camera preset position. It can open the dialog to set how many times PTZ cruise to repeat and how many seconds stay between each preset point.  Repeat(1~999 times, 1000:infinite): 1000 Interval(3~1200 seconds): 5
	Schedule for PTZ: Click "**Go**" to start PTZ patrol schedule.

6. Event Log

Event log is a convenient feature to notify users of **motion detection** at the very first time. When a motion is detected, the icon will start blinking.

By clicking the button, a window will pop up to display the list of event log as below.

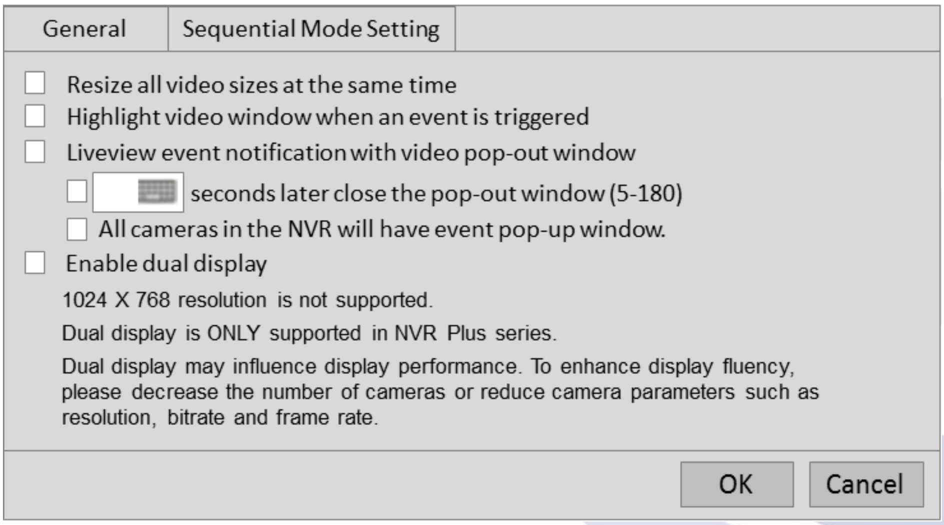


Users can view all detailed list of motion detection on both local display and remote web browser**.** At the same time, the icon will stop blinking. !

7. Option

Option button can let users directly to do live-view setting such as warning setting, windows setting and sequential mode setting.

1) General



General | Sequential Mode Setting

☐ Resize all video sizes at the same time
☐ Highlight video window when an event is triggered
☐ Liveview event notification with video pop-out window
☐ seconds later close the pop-out window (5-180)
☐ All cameras in the NVR will have event pop-up window.
☐ Enable dual display

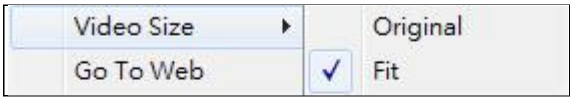
1024 X 768 resolution is not supported.

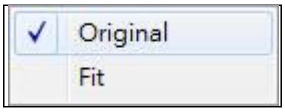
Dual display is ONLY supported in NVR Plus series.

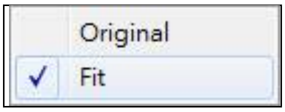
Dual display may influence display performance. To enhance display fluency, please decrease the number of cameras or reduce camera parameters such as resolution, bitrate and frame rate.

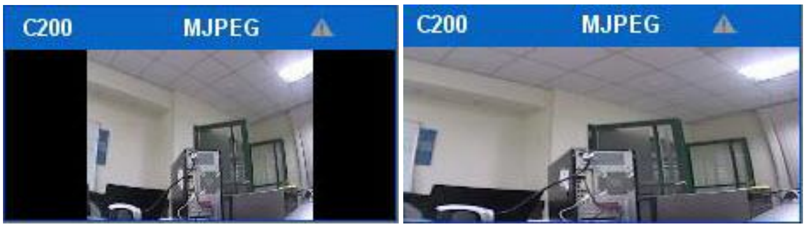
① Resize all video sizes at the same time

Only a right click on the video, users can set "all" video size either in original size or fit size.



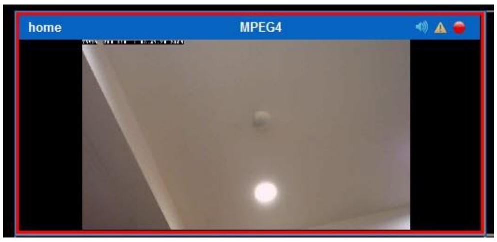




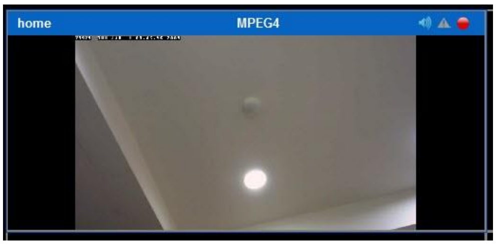


② **Highlight video window when event is triggered**

The option of “Highlight video window when event is triggered” is a warning frame which will pop out on the channel when an event is detected.

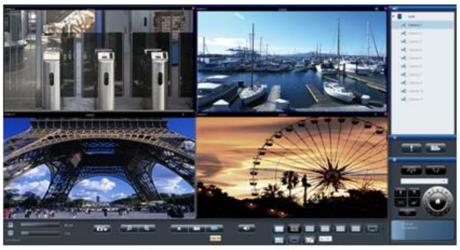


When the motion event is awarded, user can simply click on the channel with mouse, the warning frame will be stopped.

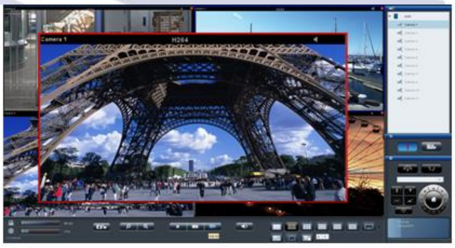


③ **Liveview event notification with video pop-out window**

Once the feature is enabled, a new window will pop out when an event is triggered so as to inform users of event happened at the very first time.



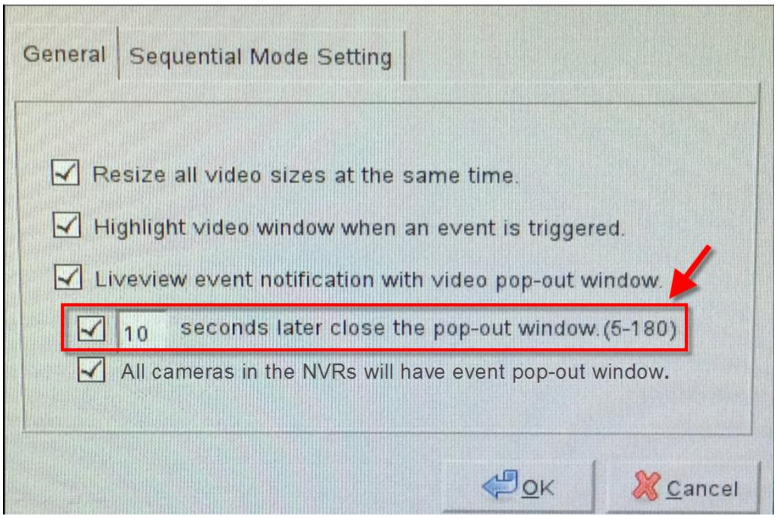
Normal



Event triggered on liveview

By clicking the pop-out window, users can manually close the window.

Users can select an optional feature to make the pop-out window automatically close after users assigned seconds. (Default is 10 seconds)



☑ Resize all video sizes at the same time.

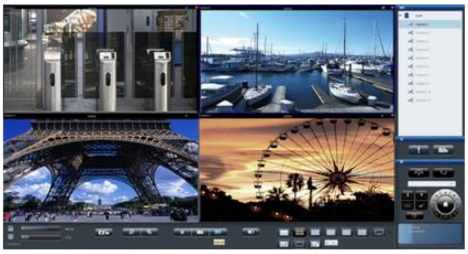
☑ Highlight video window when an event is triggered.

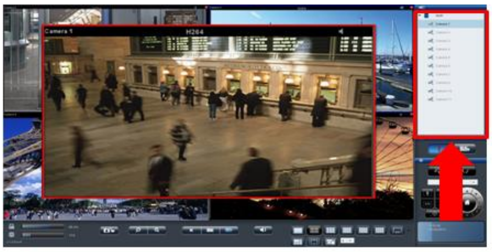
☑ Liveview event notification with video pop-out window.

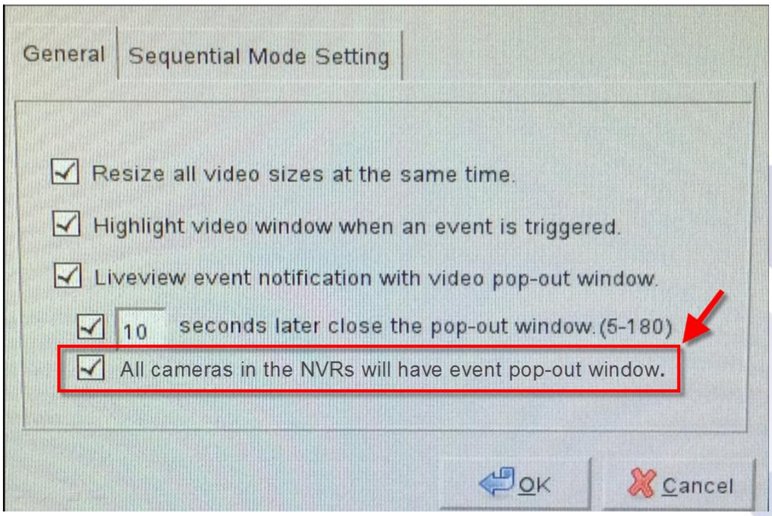
☑ 10 seconds later close the pop-out window.(5-180)

☑ All cameras in the NVRs will have event pop-out window.

If user enable **event pop-out window for all cameras**, all channels in NVR camera list will pop-out a video when events happen.


Normal


Event triggered from NVR's Camera List



☑ Resize all video sizes at the same time.

☑ Highlight video window when an event is triggered.

☑ Liveview event notification with video pop-out window.

☑ 10 seconds later close the pop-out window.(5-180)

☑ All cameras in the NVRs will have event pop-out window.

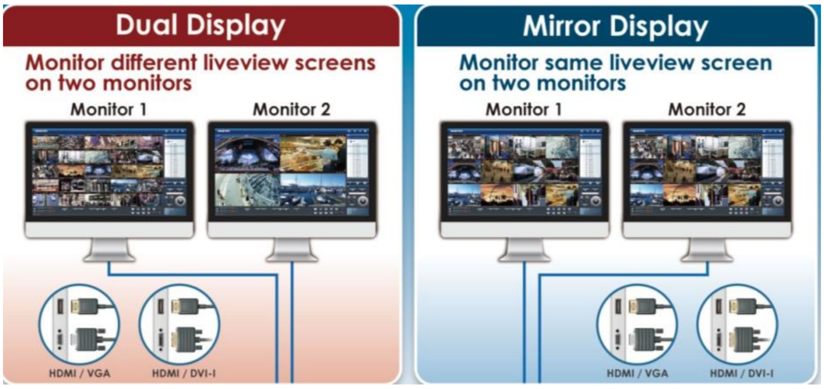
⚠ **Note:** NVR will pop-out video event window once a time, depending on which event is triggered earlier when more than one event one event is triggered at the same time.

④ Enable dual display

Via HDMI/ VGA/ DVI-I video output, NVR supports **dual display for liveview monitoring** allowing users to flexibly monitor your place in different display modes at two places.

Users can individually design display mode and camera channels on each monitor via camera list and add/drop button. NVR also allows users to **click and drag** one camera channel from monitor1 to monitor2.

Without installing extra PC, users can use either **mirror display** (same liveview display mode on two monitors) or **dual display** (different liveview display modes on two monitors) to guard your place.


Dual Display
Monitor different liveview screens on two monitors
Monitor 1
Monitor 2
HDMI / VGA
HDMI / DVI-I
Mirror Display
Monitor same liveview screen on two monitors
Monitor 1
Monitor 2
HDMI / VGA
HDMI / DVI-I

⚠ **Note1:** Dual display is supported in NVR Pro+ series.

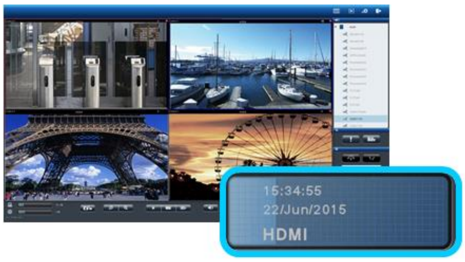
⚠ **Note2:** Monitor connected with HDMI is monitor1 while monitor connected with VGA or DVI-I is monitor2.

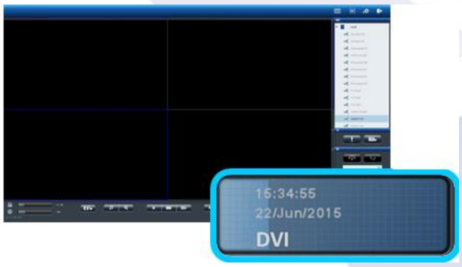
⚠ **Note3:**1024 X 768 resolution is not supported.

⚠ **Note3:** Dual display may influence display performance. To enhance display fluency, please decrease the number of cameras or reduce camera parameters such as resolution, bitrate and frame rate.

⚠ **Note4:** NVR adopts **mirror display** in default.

When enable dual display, you can check display connector type in the bottom right corner

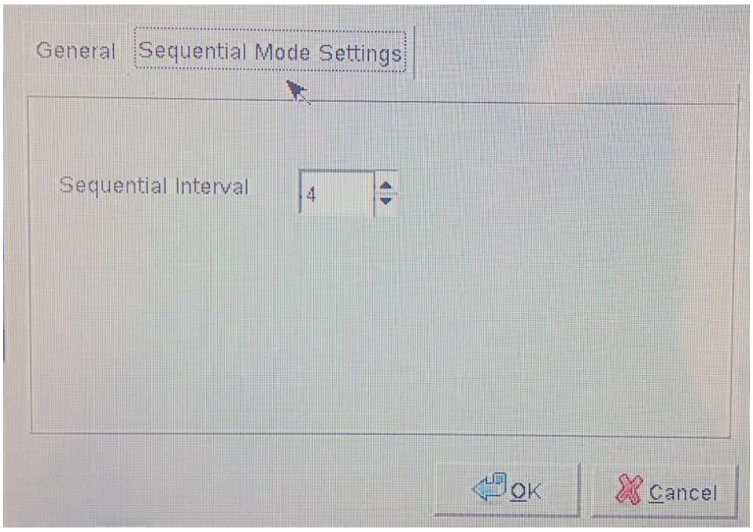

15:34:55
22/Jun/2015
HDMI


15:34:55
22/Jun/2015
DVI

⚠ **Note:** One camera can be ONLY added on one monitor. Camera name marked in gray means it has been added on another monitor.

2) Sequential mode setting

Click sequential interval to set the numbers of user-defined seconds for sequential mode.


General
Sequential Mode Settings
OK
Cancel

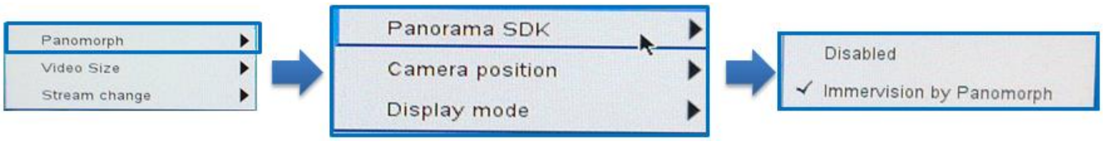
Sequential Interval: 4

3.3.3 Right Click Functions on Video Window

1. Panomorph (Software Dewap):

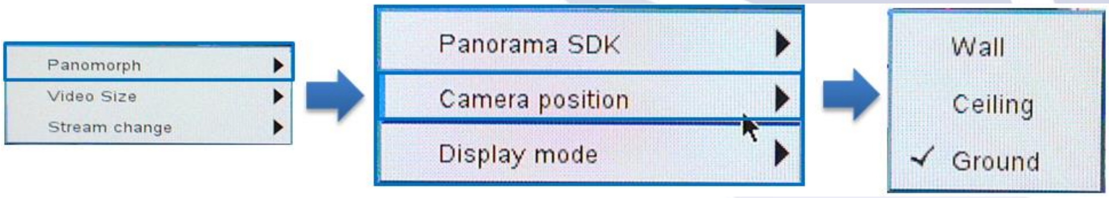
NVR Pro+ series can **dewarp up to 5 MP Panomorph IP cameras** on local display.

(1) Choose dewarp type

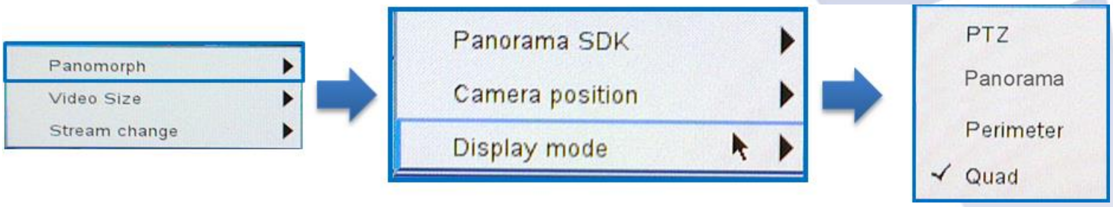

Panomorph
Video Size
Stream change
Panorama SDK
Camera position
Display mode
Disabled
✓ Immervision by Panomorph

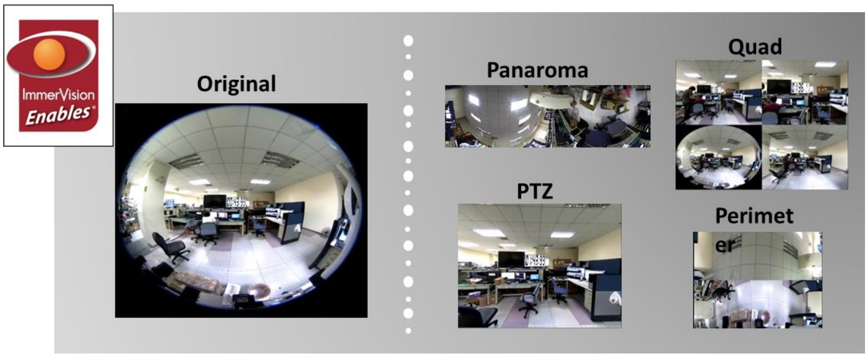
⚠ **Note:** NVR supports IP cameras equipped with Immervision's Lens and VIVOTEK dewarping engine now.

(2) Choose camera position

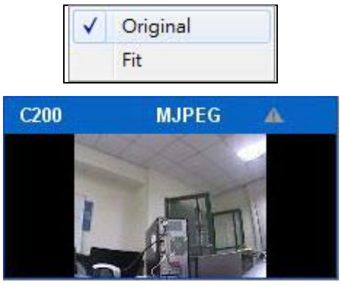

Panomorph
Video Size
Stream change
Panorama SDK
Camera position
Display mode
Wall
Ceiling
✓ Ground

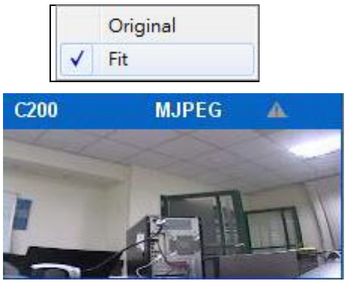
(3) Choose display mode


Panomorph
Video Size
Stream change
Panorama SDK
Camera position
Display mode
PTZ
Panorama
Perimeter
✓ Quad


ImmerVision Enables
Original
Panaroma
Quad
PTZ
Perimet er

2. Video Size: Original or Fit

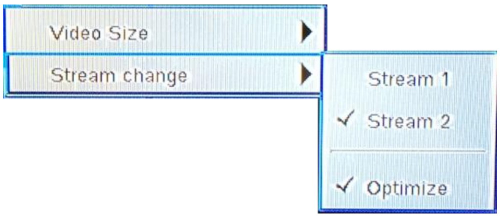

✓ Original
Fit
C200
MJPEG


Original
✓ Fit
C200
MJPEG

3. Streaming change:

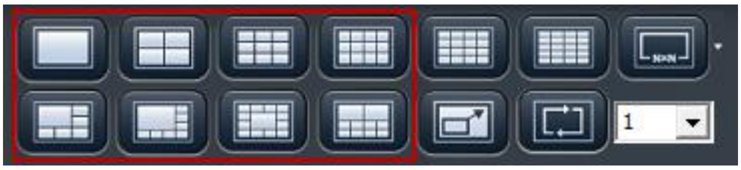
NVR allows users to setup the dual streaming configurations in camera parameter page if cameras support dual stream. It is suggested stream 1 is set for higher resolution and stream 2 for lower resolution, which helps users to choose the proper streaming in live view with intuitive control.

To switch the different streaming, users can select the channel in live view page and right click the mouse to show the list.

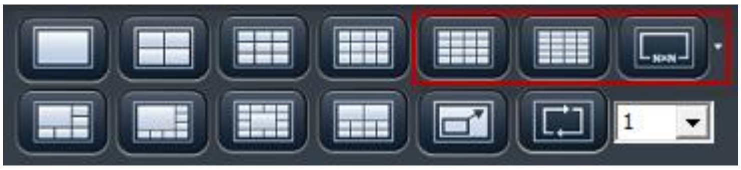

Video Size
Stream change
Stream 1
✓ Stream 2
✓ Optimize

When "Optimize" is enable, streaming type is adjusted automatically in different display modes. When users select the display mode with **more than 16ch**, NVR will automatically change to stream2 for smooth real time viewing experiences

(1) 1/3/4/5+1/8/9/10/12/12+1-ch display mode:
liveview image automatically show the main stream(stream1)



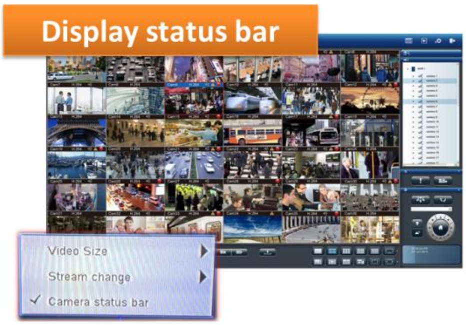
(2) 16/20/25/30/36/42/49/56/64-ch display mode:
liveview image automatically show the sub stream(stream2)

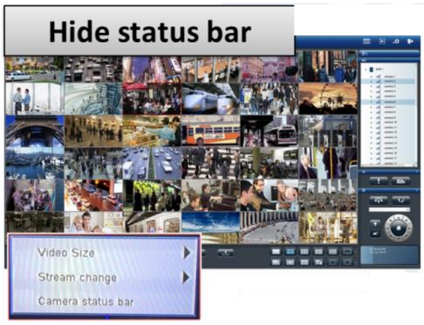


When “Optimize” is disabled, users can manually adjust streaming type, which will be memorized in different display modes.

4. Display Camera Status Bar:

Users can hide or display camera status bar depending on user preference.


Display status bar
Video Size
Stream change
✓ Camera status bar

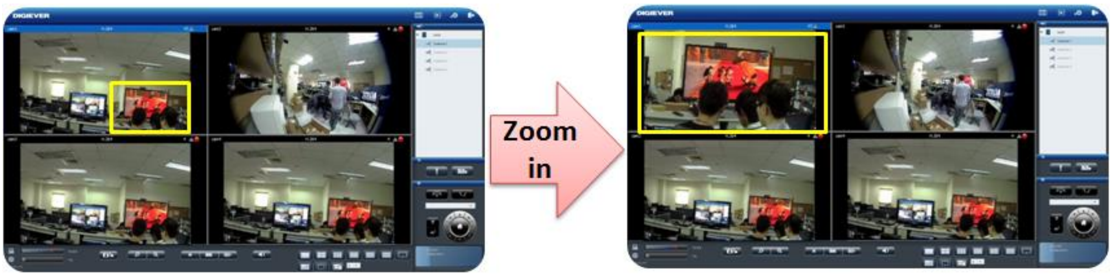

Hide status bar
Video Size
Stream change
Camera status bar

3.3.4 Zooming with Mouse Scroll

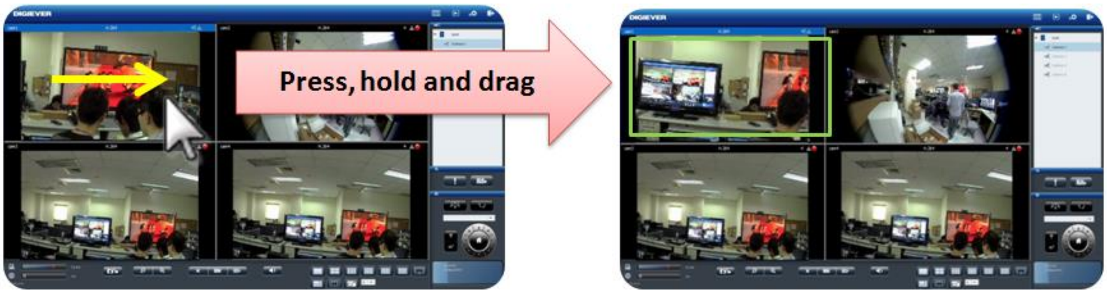
In addition to digital zoom in/out button, users can use mouse scroll to prevent potential crisis in live-view monitoring.

⚠ **Note:** For **PTZ cameras**, zooming with mouse in live-view is adopted optical zoom in/out. If users would like to view more detailed image, please **use zooming with mouse scroll first** and then click **digital zoom in/out button.**

Please click on the video window and use mouse scroll to zoom in or zoom out image



To press and hold left mouse button, drag the image to the place that you would like to monitor.



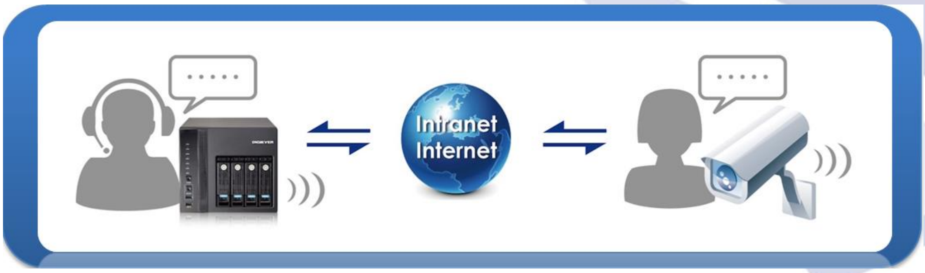
3.3.5 Two-way Audio

Two-way audio allows user to **remotely communicate via NVR and IP cameras**, which provides more flexibility in diverse surveillance applications. Through **external audio sound adapter,** users can connect speaker and microphone to NVR. On local display interface, users can verbally communicate with people around cameras.

Applications:

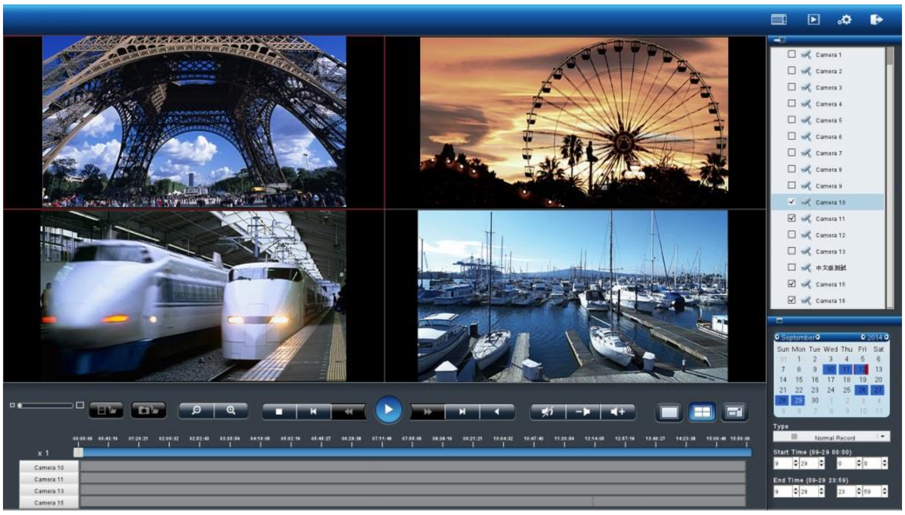
(1) Via speaker, users can hear sounds captured from remote camera sites to have the latest update.

(2) Via microphone, users can reply it back to remote camera sites.



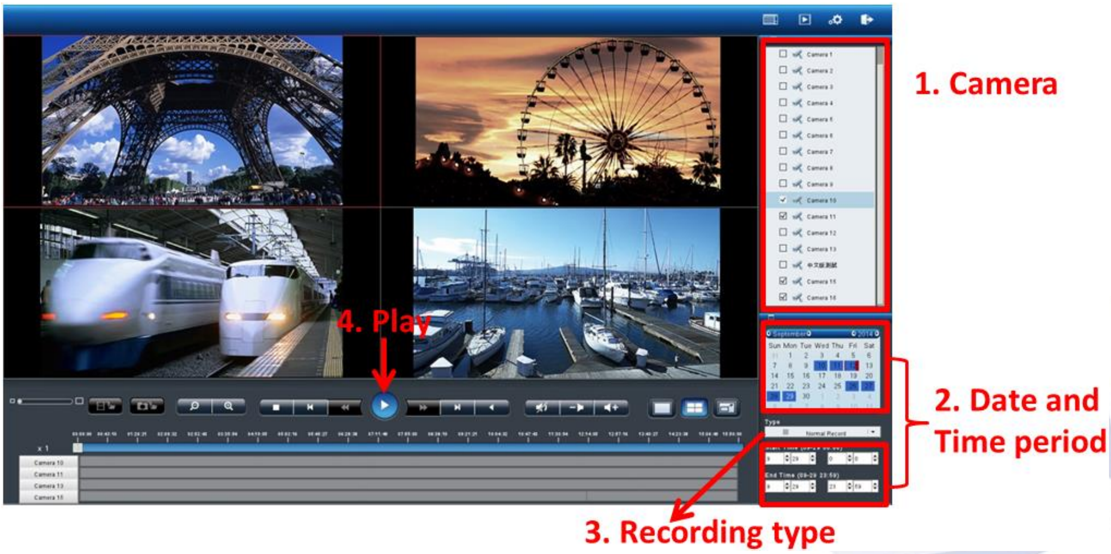
3.4 Playback

Playback is a function that allows users to view recorded videos from cameras connected to NVR. NVR offers synchronized playback up to four cameras and easy steps provided to help user sort through the recorded videos quickly.



3.4.1 Steps to Playback Videos

Users can easily search recorded videos by following playback steps. Frame by frame playback and rewind feature can also help users to minimize searching time.



Please follow the following four steps to start playback:

1 Select cameras from camera list

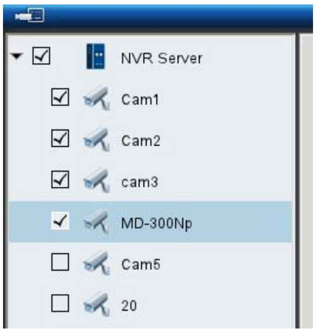
2 Select date and time period

3 Select recording type

4 Click “Play”

1. Select cameras from camera list

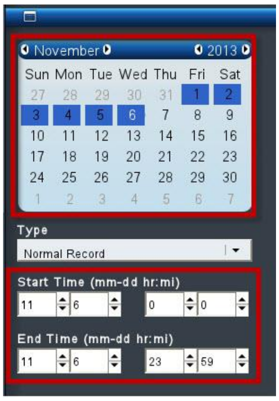
Users can select up to four cameras to play the recorded video.



☑ NVR Server
☑ Cam1
☑ Cam2
☑ cam3
✓ MD-300Np
☐ Cam5
☐ 20

2. Select date and time

Users can designate the specific date and time to playback video.
If the selected cameras have recorded videos, the date will be shown in a blue background in default (Normal Record).



November 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

Type: Normal Record

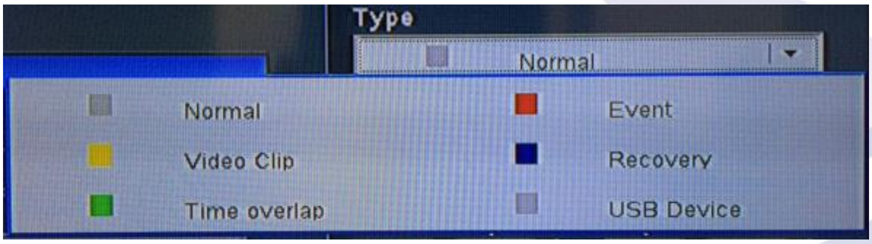
Start Time (mm-dd hr:mi): 11 6 0 0

End Time (mm-dd hr:mi): 11 6 23 59

Users can select the date from calendar to start playback for a specific day. Or users can set up specific date and time in Start Time and End Time column.

3. Select recording type

There are five types of recorded videos in different colors: **Normal Record (gray)**, **Event (red)**, **Video Clip (yellow)**, **Recovered File (blue)**, **Time Overlap (green)** and **USB Device(gray)**.



The date will change the color of background when users select different recording type.

4. Click "Play"

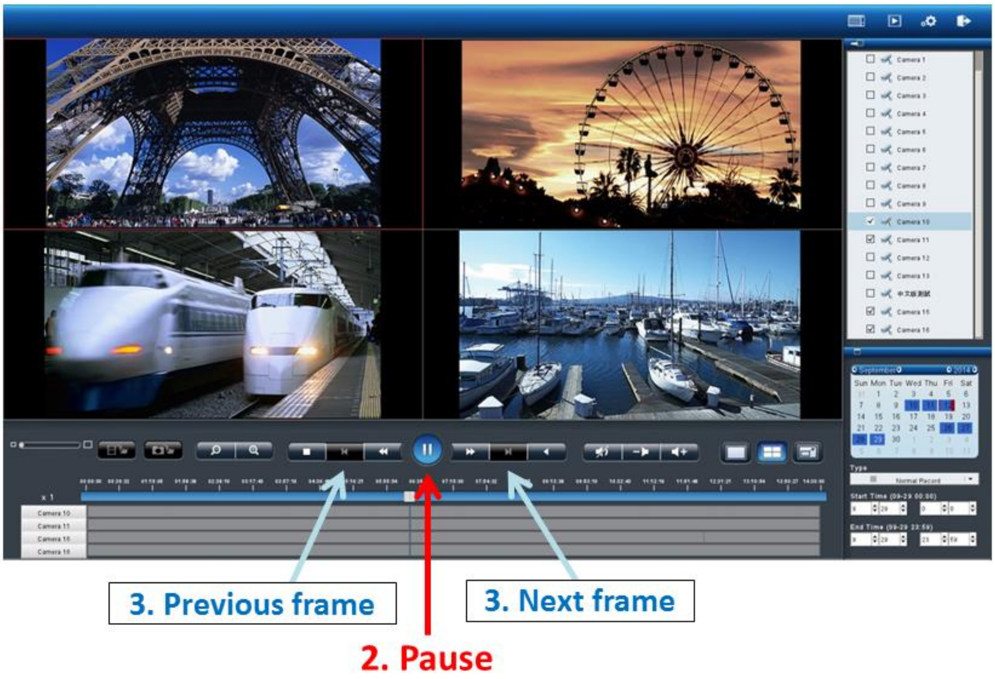
Please click play button ▶ to start playback.

Frame by Frame Playback

1 Follow above four steps to playback

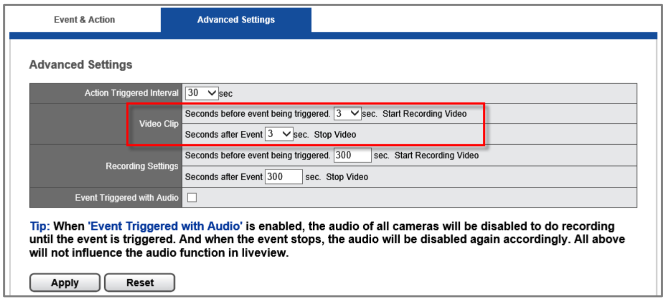
2 Click “**Pause**” button

3 Click “**Previous frame**” or “**Next frame**” button


3. Previous frame
3. Next frame
2. Pause

3.4.2 Description of Recording Types

1. Normal Record (gray):
   Normal Record means there is no special conditions happened such as event, time overlap. It helps users to know at that time whether NVR has recorded videos or not.
2. Event (red):
   Event means an event is triggered at that time, which helps users to efficiently find event recoded video. Please set up event setting in advance. For more information, please refer to **5.2.3 Event & Action Management**
3. Video Clip (yellow):
   Video Clip means a brief video clip set by user to manage on event triggered recording file, allowing to be sent by E-mail as well and user can change the Pre-time (up to 10 sec.) and Post-time (up to 10 sec.) in Configuration Page> Recording & Event> Event & Action Management > Advanced Settings as below:



Advanced Settings

Action Triggered Interval: 30 sec

Video Clip: Seconds before event being triggered. 3 sec. Start Recording Video

Video Clip: Seconds after Event 3 sec. Stop Video

Recording Settings: Seconds before event being triggered. 300 sec. Start Recording Video

Recording Settings: Seconds after Event 300 sec. Stop Video

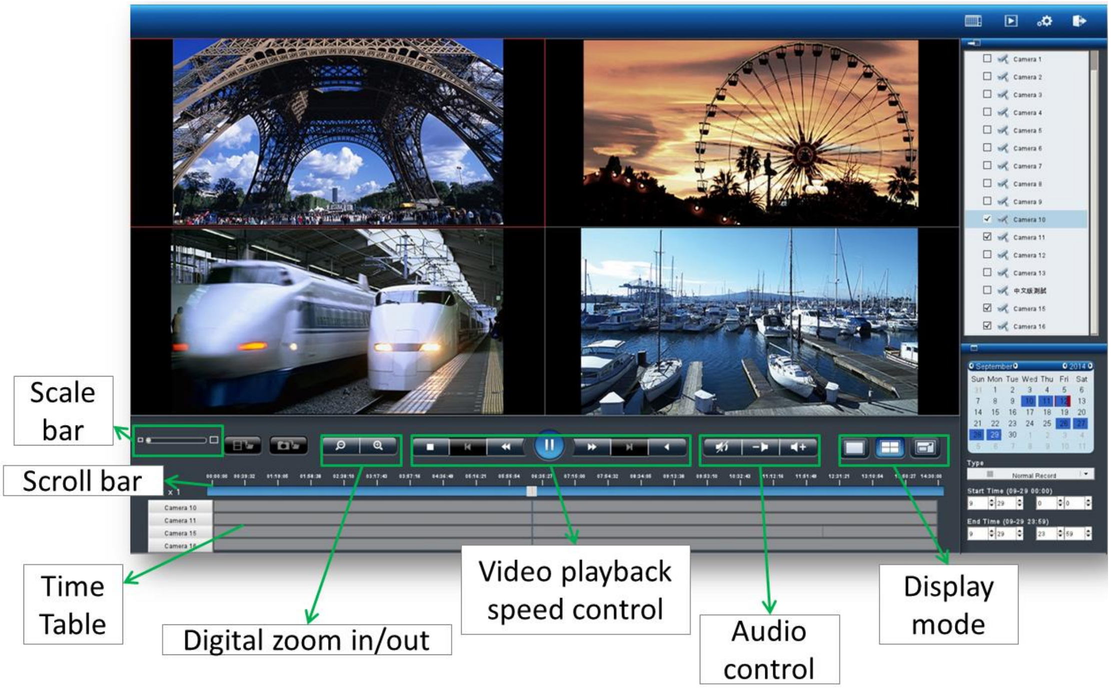
Event Triggered with Audio ☐

Tip: When 'Event Triggered with Audio' is enabled, the audio of all cameras will be disabled to do recording until the event is triggered. And when the event stops, the audio will be disabled again accordingly. All above will not influence the audio function in liveview.

4. Recovered File (blue):
   Recovered File is generated once the NVR server resumes working once the power electric back. This is special unique and advanced feature of NVR.

   For an example, when the premises was broken into and the main power switch was cut, there was a period of critical time of recording files were captured by IP camera but it was not insufficient time to be converted the temp video files to be wrote into hard disk drive. Once the NVR server gets power resume, the NVR is able to generate a so-called Recovered File and save on hard disk drive. User can then find out the critical evidence clips if the camera successful captured the scenario.
5. Time Overlap (green):
   Time Overlap file is generated once NVR server's time is changed during recording task. For examples, using NVR's built-in NTP server to synchronize a required time, or alter the NVR server time manually, or change the time zone and enable daylight saving time.
6. USB Device(gray)
   USB device will show when you insert USB device to NVR's USB backup port. Users can directly playback videos exported in "**original video files**" format on NVR playback page. For more information, please refer to **3.4.4 Export Files.**

3.4.3 Main Functions of Playback



☐ Camera 1
☐ Camera 2
☐ Camera 3
☐ Camera 4
☐ Camera 5
☐ Camera 6
☐ Camera 7
☐ Camera 8
☐ Camera 9
☑ Camera 10
☑ Camera 11
☐ Camera 12
☐ Camera 13
☐ 中文版測試
☑ Camera 15
☑ Camera 16

September 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

Type: Normal Record

Start Time (09-29 00:00): 9 29 0 0

End Time (09-29 23:59): 9 29 23 59

Camera 10
Camera 11
Camera 15
Camera 16

1. Display mode

The screen shows the recording time of each channel in the top of each grid.

Click ⛶ to view the video in full screen.

One-screen ▭ and four-screens ⊞ are also provided to display playback.

2. Audio control

The audio will be played according to the channel selected on the screen.

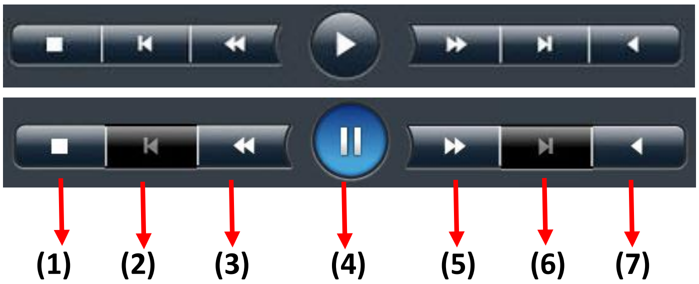
Icon	Description
🔇	**Mute:** Disable audio for all playback channels.
🔉	**Volume down:** volume less than the normal volume setting
🔊	**Volume up:** volume more than the normal volume setting

3. Digital zoom in and digital zoom out 🔍 🔍

The image can be enlarged by clicking digital zoom-in button.

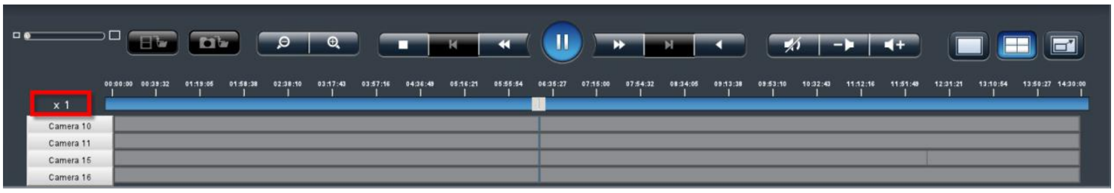
The image can also return to previous sizes by clicking the digital zoom out button.

4. Video playback speed control



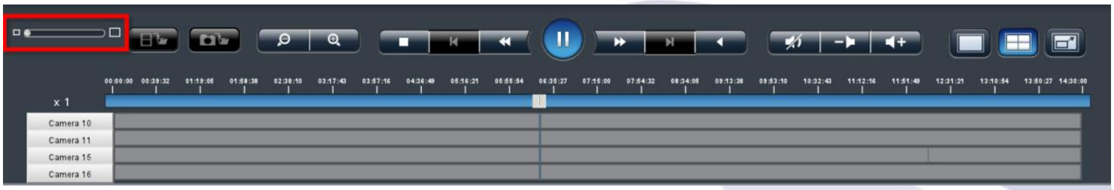
(1) **Stop**: to clear playback videos
(2) **Previous frame:** to show the earlier frame
(3) **Slow motion**: to play in slower speed
(4) **Play/ Pause**: to play video file or to temporarily stop the playback
(5) **Fast forward**: to play in faster speed
(6) **Next frame**: to show the next frame
(7) **Rewind:** to let video automatically wind backward

Playback speed status is beside scroll bar.


00:00:00
00:39:32
01:19:05
01:58:38
02:38:10
03:17:43
03:57:16
04:36:49
05:16:21
05:55:54
06:35:27
07:15:00
07:54:32
08:34:05
09:13:38
09:53:10
10:32:43
11:12:16
11:51:49
12:31:21
13:10:54
13:50:27
14:30:00
x 1
Camera 10
Camera 11
Camera 15
Camera 16

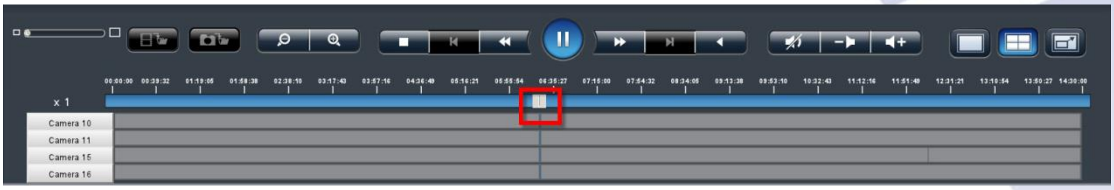
5. Scale bar

Users can move the bar to enlarge or narrow down time period to check video footage in time table.


x 1
Camera 10
Camera 11
Camera 15
Camera 16

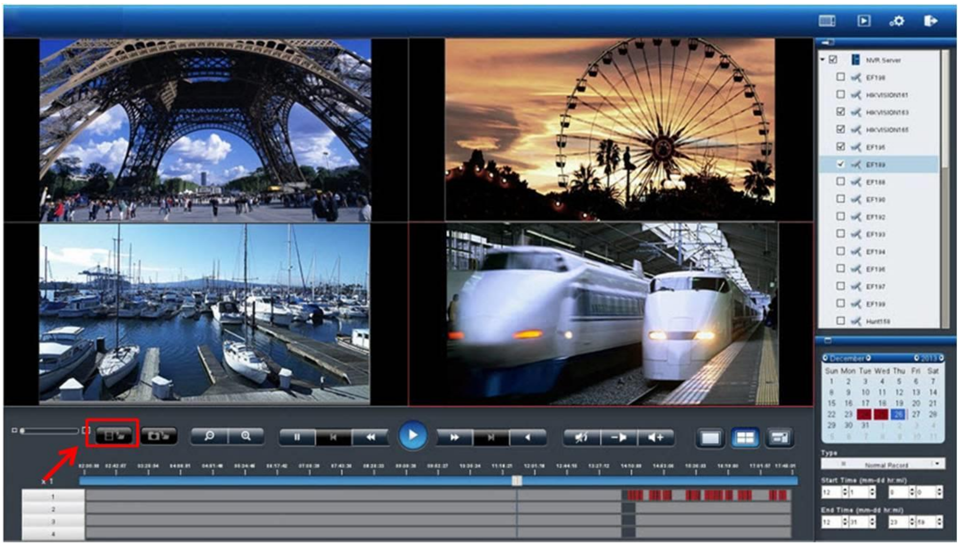
6. Scroll bar

By moving scroll bar, users can go to the specific recording time directly. Date and time are shown above scroll bar to provide time reference.


x 1
Camera 10
Camera 11
Camera 15
Camera 16

3.4.4 Export Files

Export function allows users to export file to **USB device** or **USB type DVD burner** directly.



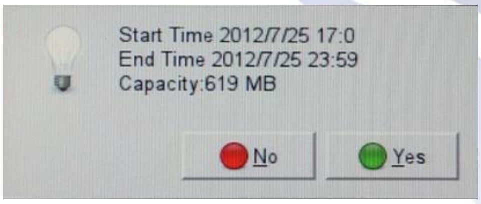
Please select cameras, video file types, date and the time period first, and then click the export button to copy the files.

⚠ **Note:** NVR offers 3 formats to export recorded videos depending on different security level. More information, please refer to 5.6.4 USB Backup -> 3.**Advance Settings**

Users will be asked whether NVRPlayer and NVRCheck should be downloaded with video files.

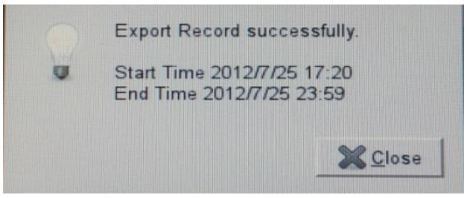
⚠ **Note:** NVRPlayer is the player for watching recording files from NVR.

⚠ **Note:** NVRCheck is the verification tool to verify if the recorded files are originated from NVR.



Start Time 2012/7/25 17:0
End Time 2012/7/25 23:59
Capacity:619 MB

Users can check start time, end time and capacity before implement the files export.



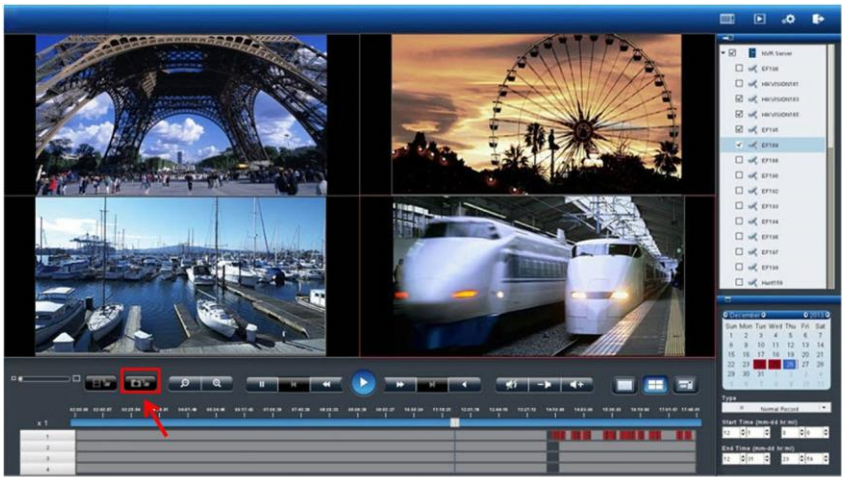
Export Record successfully.

Start Time 2012/7/25 17:20
End Time 2012/7/25 23:59

If the export is successful, the message will be shown as above.

3.4.5 Snapshot

Users can have the snapshot while having the playback in local display. It needs to plug in **USB device** for the export of snapshot images and it will have 10 sequential images to be saved in the USB dongle.



3.4.6 Zooming with Mouse Scroll

In addition to digital zoom in/out button, users can use mouse scroll to find out crucial proof in incident site in playback

Please click on the video window and use mouse scroll to zoom in or zoom out image To press and hold left mouse button, drag the image to the place that you would like to monitor.

3.5 Others

3.5.1 Screenshot on Local Display

Press "PrtSc SysRq" PrtScn SysRq the image of full screen in local display can be pictured in the NVR HDDs. The image will be saved in the folder “Public.” Users can reach the folder from remote web browsers and access the file by a remote PC’s Windows Networking and FTP Service.

⚠ **Note**: To use Windows Networking and FTP Service, please enable both in “**File Sharing Service**” in configuration page. Please refer to chapter 5.3.3 File Sharing Service.

3.5.2 System Upgrade on Local Display

NVR supports system upgrade in local display. For more information, please refer to Chapter 5 - 5.7.2 System Upgrade.

Note: System upgrade in local display is supported in Pro series and Pro+ series.

3.5.3 USB Backup by Hardware or Software USB BACKUP Buttons

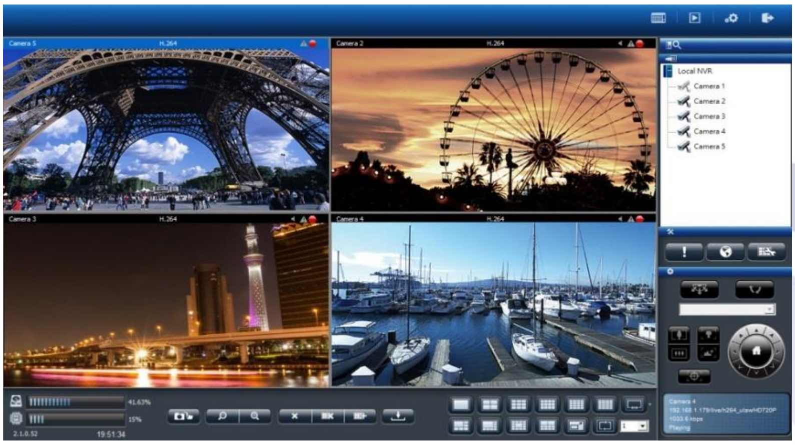
Users can easily back up recorded video by clicking "**USB Backup**" button on NVR or **software USB BACKUP virtual button** on local configuration page. Depending on different requirements, users can insert **USB dongle or USB type DVD burner** to export confidential videos. For more information, please refer to **5.6.4 USB Backup.**

Chapter 4. Use NVR by Remote Web Browser

Users can use multiple web browsers (IE/ Chrome/ Firefox/ Opera/Opera browser in Windows) to monitor the network camera and view playback.

4.1 Liveview

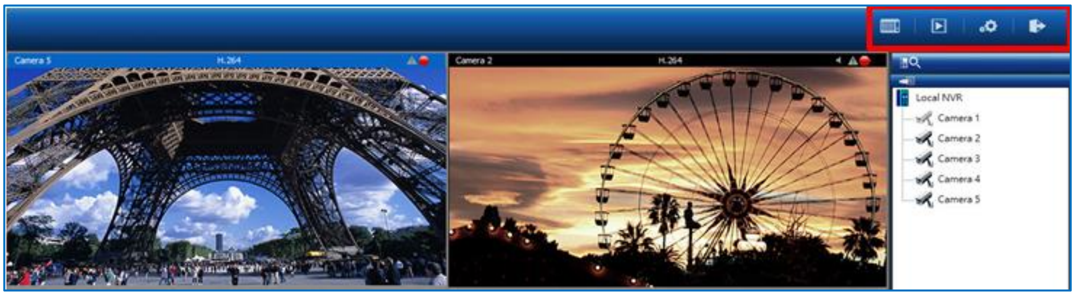
After the Quick Configuration is complete, NVR will guide you to live view. Users can view live video stream from IP camera via network and monitor the instantaneous view remotely.


Camera 5
H.264
Camera 2
Camera 3
Camera 4
Local NVR
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5

Liveview displays the video according to the camera list which has been configured in camera settings of Quick Configuration.

▾ Quick Configuration
> Quick Configuration

4.1.1 Select View Modes on Liveview Page


Camera 5
H.264
Camera 2
H.264
Local NVR
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5

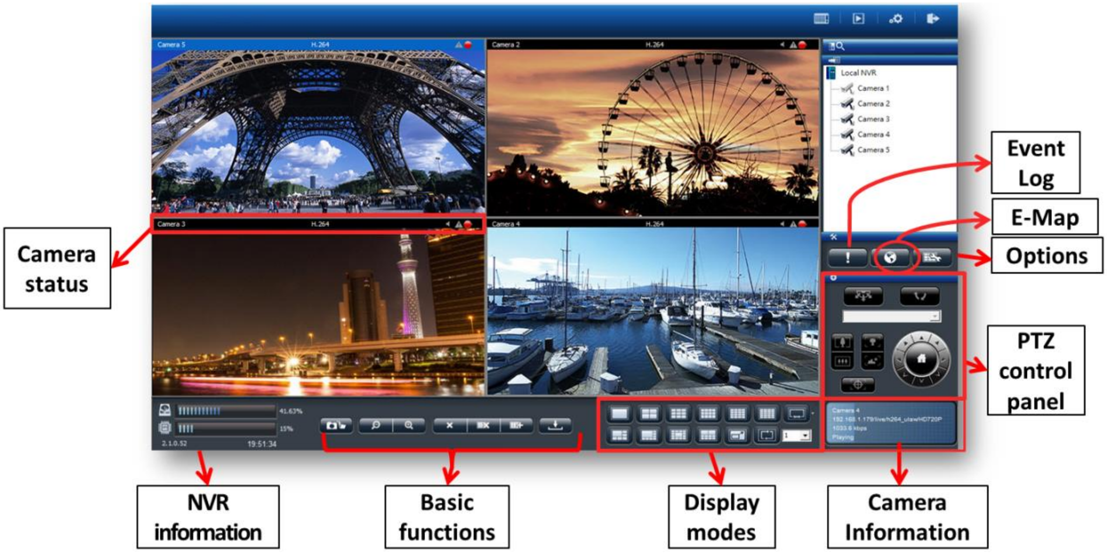
On top right of live view, users can select four view modes.

Mode	Description
▦	**Liveview**: Click “**Liveview**” to control the monitoring instantaneously.
▷	**Playback**: Click “**Playback**” to play and to export the recorded video files.
⚙	**Configuration**: Click “**Configuration**” to configure camera, recording, event, management, network, quick configuration and system.
➜	**Logout**: Click “**Logout**” to leave NVR.

Multi-window Operation:

Multi-window operation allows users to individually execute liveview, playback and configuration in different web pages to operate multi-task monitoring to enhance surveillance efficiency.

4.1.2 Main Functions for Liveview


Event Log
E-Map
Options
PTZ control panel
Camera status
NVR information
Basic functions
Display modes
Camera Information

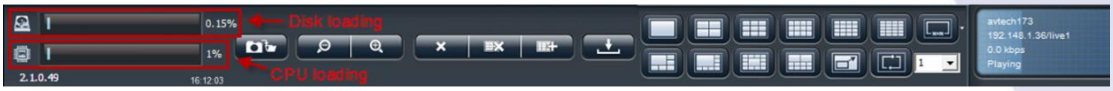
1. Camera status

Icon	Description
cam3	**Camera name**: The name of the camera is located in the top left corner in each video window. Users can rename the camera via the path "Configuration->IP Camera->Camera Settings."
H264	**Video compression format**: M-JPEG/MPEG-4/H.264
🔈 🔊	**Audio**: Once camera supports audio, NVR shows audio in blue when you select the window. Vice versa, NVR shows audio in grey.
⚠	**Event**: When event happens, NVR shows warning to user for instant alert.
●	**Recording status**: The window shows whether camera is recording or not.
	Blue border: The outline border surrounds the selected window to highlight the focus image.

2. NVR information:

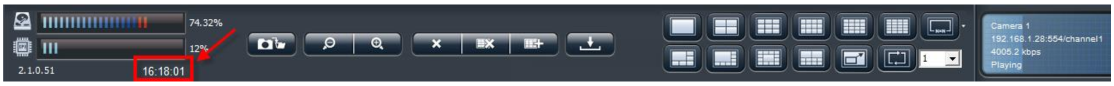
(1) Firmware version:

Users can find out the firmware version directly without entering configuration page.


0.15%
Disk loading
1%
CPU loading
2.1.0.49
16:12:03
avtech173
192.168.1.36/live1
0.0 kbps
Playing

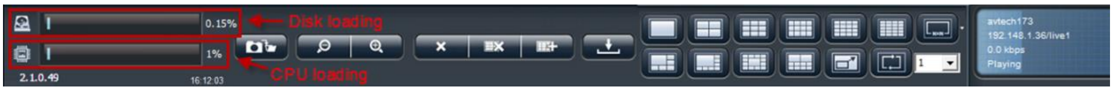
(2) Current time

Users can find out current time directly.

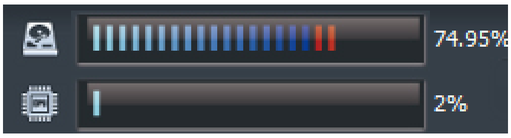

74.32%
12%
2.1.0.51
16:18:01
Camera 1
192.168.1.28:554/channel1
4005.2 kbps
Playing

(3) Disk and CPU loading indicator:

Users can find out Disk and CPU loading directly without entering configuration page.


0.15%
Disk loading
1%
CPU loading
2.1.0.49
16:12:03
avtech173
192.168.1.36/live1
0.0 kbps
Playing

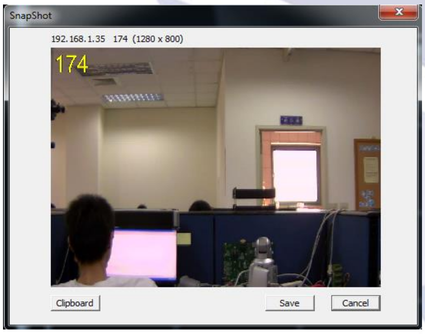
Disk and CPU indicator shows blue when loading is70% or under, and shows red as a warning when it reach to more than 70%.

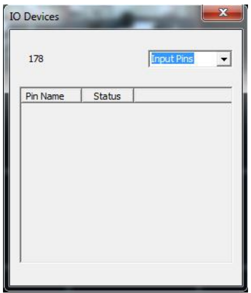
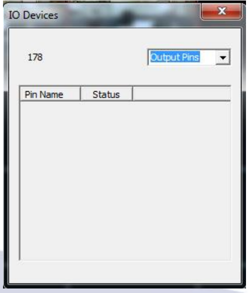
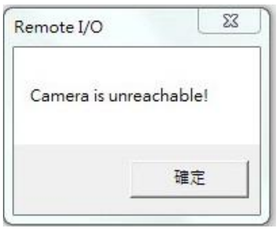
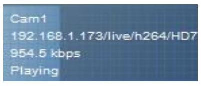


With changing the video configuration, like resolution, FPS and video quality or changing RAID type, can influence the CPU loading, and users can easily find the best balance in NVR.

3. Basic function:

The function of each button will be briefly described below:

Icon	Description
📷	**Snapshot:** Click on the "Snapshot" to save snapshots. Then, a window will pop up to display the image.  SnapShot 192.168.1.35 174 (1280 x 800) 174 Clipboard Save Cancel There are three functions for snapshot: 1) **Clipboard:** To copy image to computer's temporary memory. User can paste image to graphics painting program such as Paint for advanced editing. 2) **Save:**

	To save image to desired path. 3) **Cancel:** To cancel snapshot.
	Digital zoom in/ out: Select a channel to enable digital zoom function
	Drop: Drop the camera from monitoring.
	Drop all: Drop all cameras from monitoring.
	Add all: Add all cameras from monitoring.
	Remote IO: Check camera DI/DO control for its input pins and output pins. ⚠ **Note:** This feature supports Brickcom cameras for now. **(1) Camera Input:** Directly check camera input status (On or Off)  IO Devices 178 Input Pins Pin Name Status **(2) Camera Output:** Directly check and enable/disable camera output setting  IO Devices 178 Output Pins Pin Name Status If camera does not support DI/DO feature, a window will pop up as below.  Remote I/O Camera is unreachable!
 Cam1 192.168.1.173/live/h264/HD7 954.5 kbps Playing	**Camera information**: Consist of Camera Name, IP address, bit rate, and status.

4. Display mode

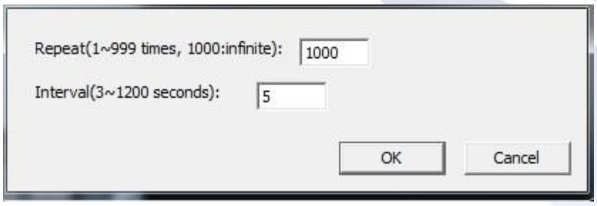
NVR supports multi-display modes for monitoring. Click the icon of display mode to monitor live view. When you click a display mode, the mode icons will turn into blue.

⚠ **Note:** Please check the compatible list before using joystick to adjust PTZ cameras.

Icon	Description
▭	1 screen
⊞	4 screen
▦	9 screen
▦	12 screen
▦	16 screen
▦	20 screen
25	3/5/25/30/36/42/49/56/64 screen
▦	5+1 screen
▦	8 screen
▦	12+1 screem
▦	10 screen
⤢	Full Screen
⟲	Sequential mode Click 1 ▾ to choose the page of liveview 1 ▾ 1 2 3 4.

5. PTZ Control Panel

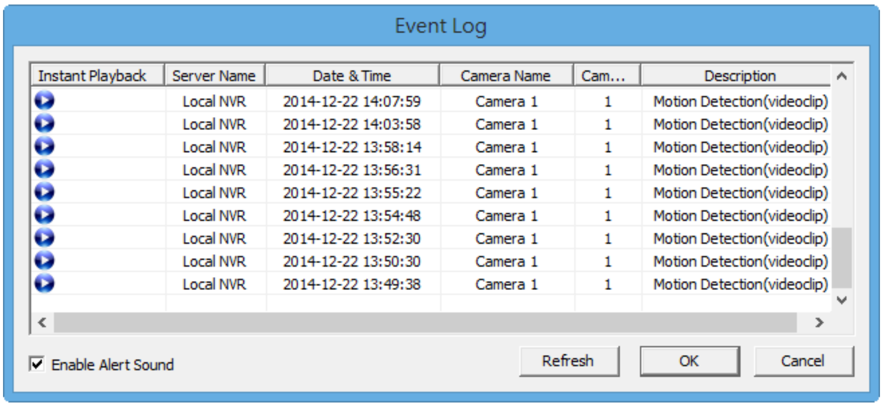
If IP camera supports PTZ function, users can use the control panel to adjust the viewing angle. The following functions are available depending on the camera models.

Icon	Description
	PTZ panel: PTZ allows users to monitor large areas with a single network camera. Pan, tilt, and zoom functions can be controlled remotely by users. If device supports PTZ control, users can click on the arrows to pan and/or tilt the camera. The house in the middle can take users back to original monitoring position.
	Preset positions: Select the preset positions which are defined in PTZ camera and the camera will move to the position that user selects.
	Optical zoom in/ out: If camera supports PTZ control, users can adjust PTZ camera to zoom out or zoom in.
	Focus near / far: If camera supports PTZ control, users can adjust the focus of the PTZ camera to focus near or focus far.
	Auto Focus: To automatically focuses the camera lens on a subject.
	Schedule for PTZ: Select "**Set**" to set camera preset position. (reserved) It can open the dialog to set how many times PTZ cruise to repeat and how many seconds stay between each preset point  Repeat(1~999 times, 1000:infinite): 1000 Interval(3~1200 seconds): 5
	Schedule for PTZ: Click "**Go**" to start PTZ patrol schedule.

6. Event log:

Event log can help users to notice **motion detection** at the very first time. When a motion is detected, the icon will start blinking.

By clicking the button, a window will pop up to display the list of event log as below. At the same time, the icon will stop blinking. !

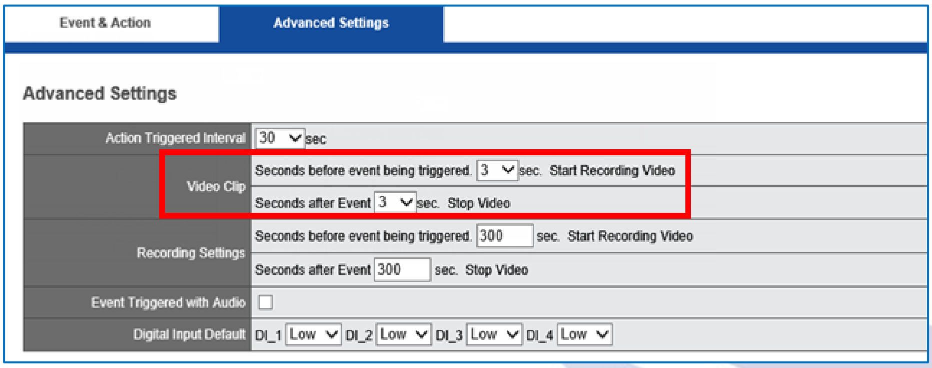

Event Log

Instant Playback	Server Name	Date & Time	Camera Name	Cam...	Description
▶	Local NVR	2014-12-22 14:07:59	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 14:03:58	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 13:58:14	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 13:56:31	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 13:55:22	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 13:54:48	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 13:52:30	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 13:50:30	Camera 1	1	Motion Detection(videoclip)
▶	Local NVR	2014-12-22 13:49:38	Camera 1	1	Motion Detection(videoclip)

☑ Enable Alert Sound

Users can easily read detailed event information and playback recorded video (video clip) by clicking ▶ in instant playback column.

⚠ **Note:** The default length of video clip for instant playback is 6 seconds. Users can edit the length of video clip by visiting configuration page:
Recording & Event > Event & Action Management > Advanced Settings



Advanced Settings

Action Triggered Interval: 30 sec

Video Clip: Seconds before event being triggered. 3 sec. Start Recording Video

Seconds after Event 3 sec. Stop Video

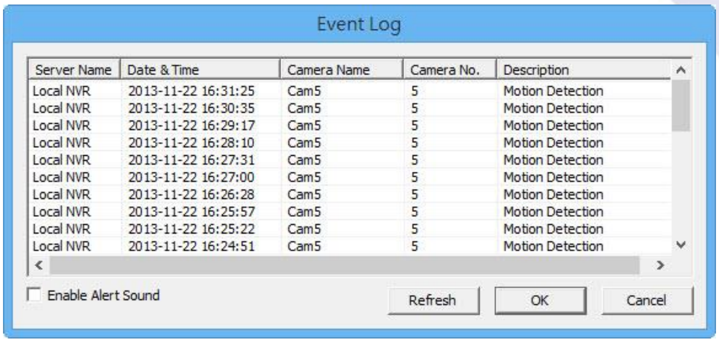
Recording Settings: Seconds before event being triggered. 300 sec. Start Recording Video

Seconds after Event 300 sec. Stop Video

Event Triggered with Audio ☐

Digital Input Default: DI_1 Low DI_2 Low DI_3 Low DI_4 Low

Enable Alert sound


Event Log

Server Name	Date & Time	Camera Name	Camera No.	Description
Local NVR	2013-11-22 16:31:25	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:30:35	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:29:17	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:28:10	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:27:31	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:27:00	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:26:28	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:25:57	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:25:22	Cam5	5	Motion Detection
Local NVR	2013-11-22 16:24:51	Cam5	5	Motion Detection

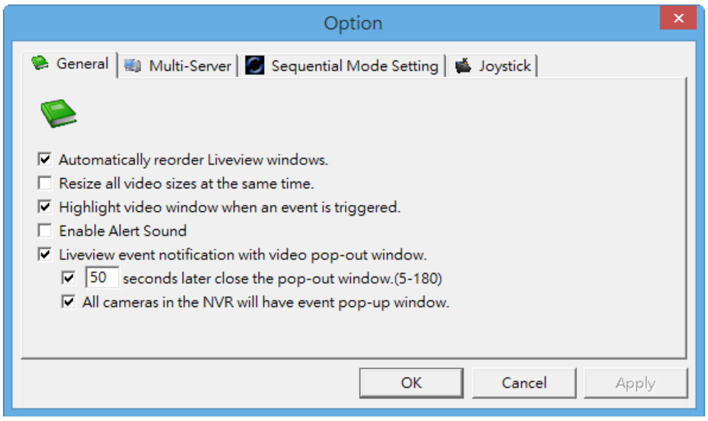
☐ Enable Alert Sound

If users enable the function, the remote web browser will sound the alarm to notify users when motion detection is triggered.

(Alert sound can also be set in Option>General.)

7. Option:

1) General:



Option

General | Multi-Server | Sequential Mode Setting | Joystick

☑ Automatically reorder Liveview windows.
☐ Resize all video sizes at the same time.
☑ Highlight video window when an event is triggered.
☐ Enable Alert Sound
☑ Liveview event notification with video pop-out window.
☑ 50 seconds later close the pop-out window.(5-180)
☑ All cameras in the NVR will have event pop-up window.

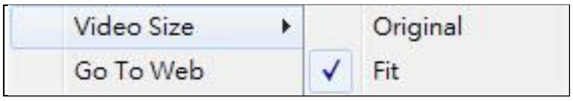
OK | Cancel | Apply

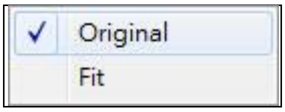
① **Automatically reorder Liveview windows**

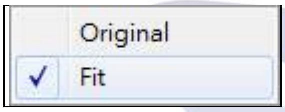
To rearrange video in order without blank grid after users drop video from live-view.

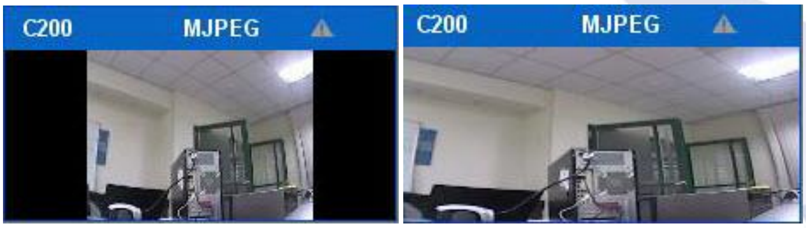
② **Resize all video sizes at the same time**

Only a right click on the video, users can set "all" video size either in original size or fit size.



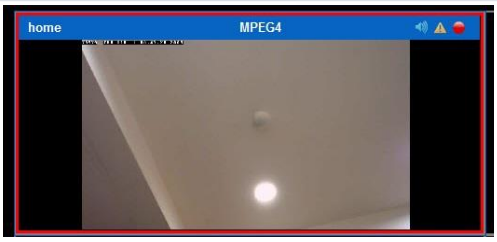




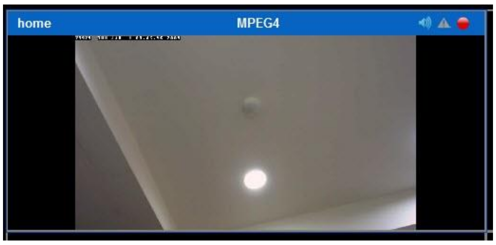


③ **Highlight video window when event is triggered**

The option of “Highlight video window when event is triggered” is a warning frame which will pop out on the channel when an event is detected.



When the motion event is awarded, user can simply click on the channel with mouse, the warning frame will be stopped.

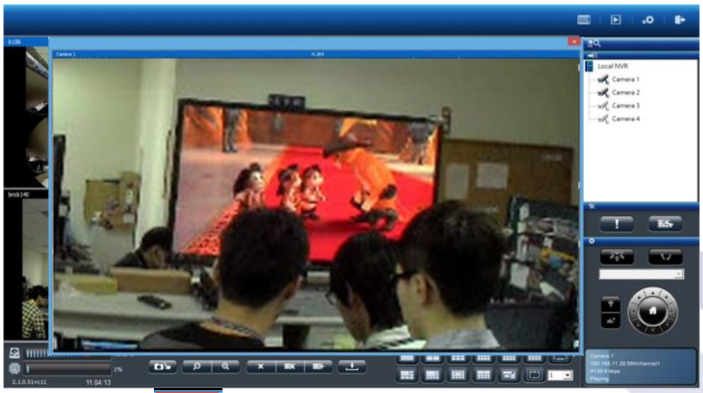


④ **Enable Alert sound**

If users enable the function, the remote web browser will sound the alarm to notify users when motion detection is triggered.

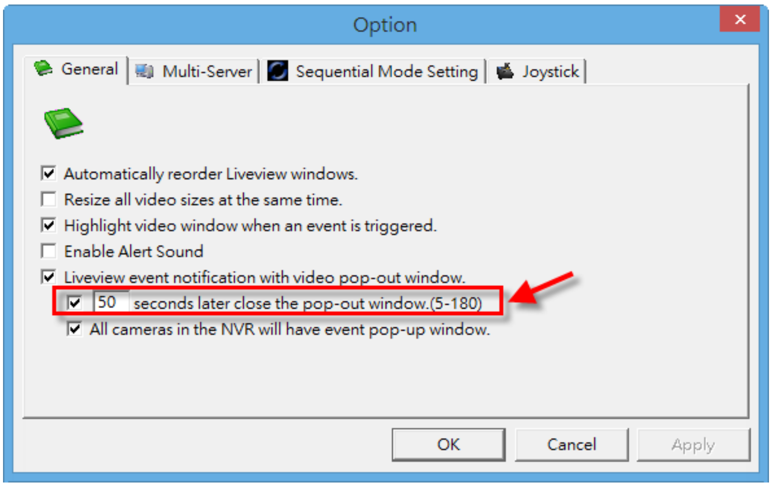
⑤ **Liveview event notification with video pop-out window**

Once the feature is enabled, a new window will pop out when an event is triggered so as to inform users of event happened at the very first time.


Camera 1
H.264
Local NVR
Camera 1
Camera 2
Camera 3
Camera 4

By clicking ✕ button at the top-right corner, users can manually close the pop-out window.

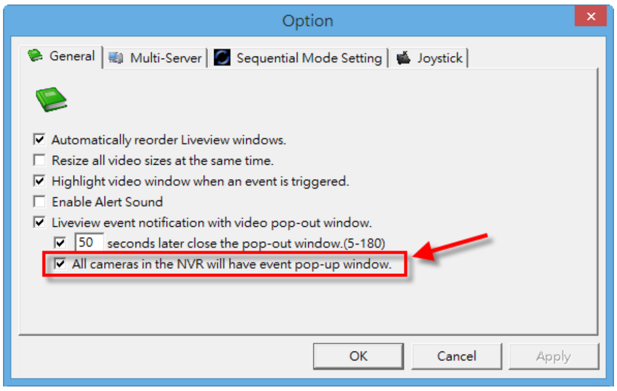
__seconds later close the pop-out windows. (5-180)


Option
General
Multi-Server
Sequential Mode Setting
Joystick
OK
Cancel
Apply

☑ Automatically reorder Liveview windows.
☐ Resize all video sizes at the same time.
☑ Highlight video window when an event is triggered.
☐ Enable Alert Sound
☑ Liveview event notification with video pop-out window.
  ☑ 50 seconds later close the pop-out window.(5-180)
  ☑ All cameras in the NVR will have event pop-up window.

Users can select an optional feature to make the pop-out window automatically close after users assigned seconds. (Default is 10 seconds)

All cameras in the NVR will have event pop-out window.


Option
General
Multi-Server
Sequential Mode Setting
Joystick
OK
Cancel
Apply

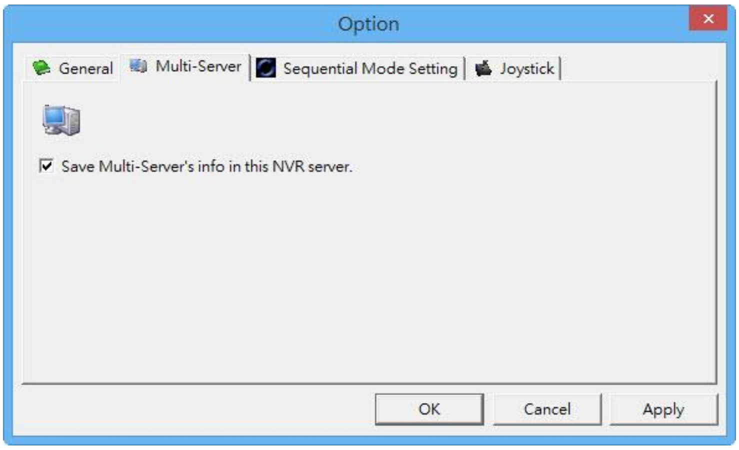
☑ Automatically reorder Liveview windows.
☐ Resize all video sizes at the same time.
☑ Highlight video window when an event is triggered.
☐ Enable Alert Sound
☑ Liveview event notification with video pop-out window.
  ☑ 50 seconds later close the pop-out window.(5-180)
  ☑ All cameras in the NVR will have event pop-up window.

If user enables **event pop-out window for all cameras**, all channels in NVR camera list will pop-out a video when an event is triggered.

⚠ **Note:** NVR will pop-out video event window once a time, depending on which event is triggered earlier when more than one event is triggered at the same time.

2) Multi-Server:

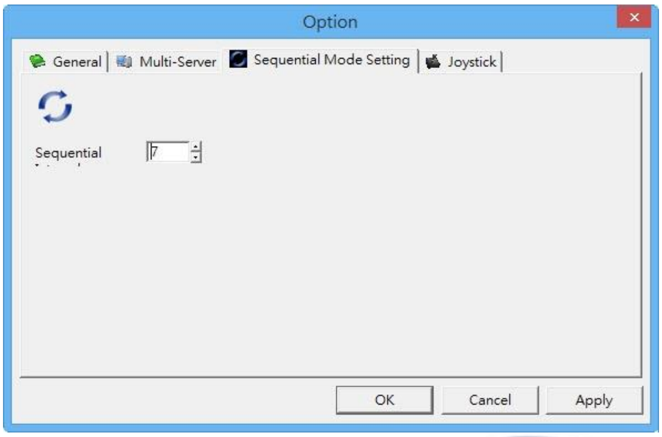
Users can save the camera list of multi-server in live-view page.


Option
General
Multi-Server
Sequential Mode Setting
Joystick
OK
Cancel
Apply

☑ Save Multi-Server's info in this NVR server.

3) Sequential Mode Setting:

Click sequential interval to set the numbers of user-defined seconds for sequential mode.

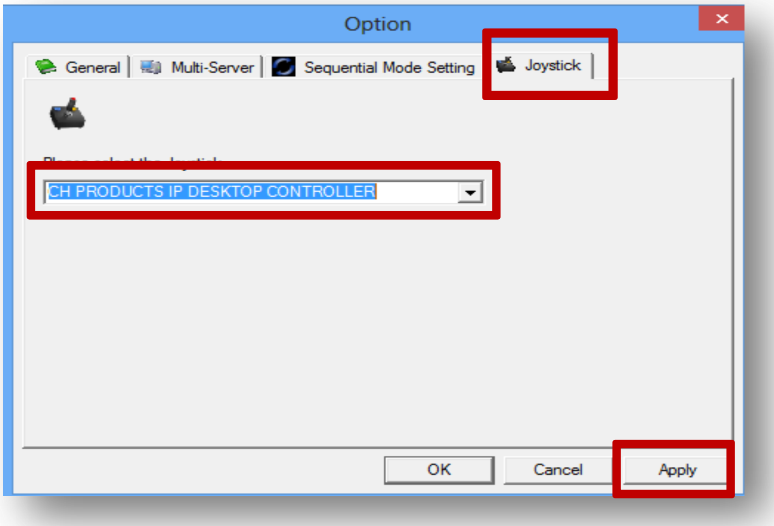

Option
General
Multi-Server
Sequential Mode Setting
Joystick
OK
Cancel
Apply

Sequential 7

4) Joystick

Users are able to manipulate PTZ camera with USB joystick.

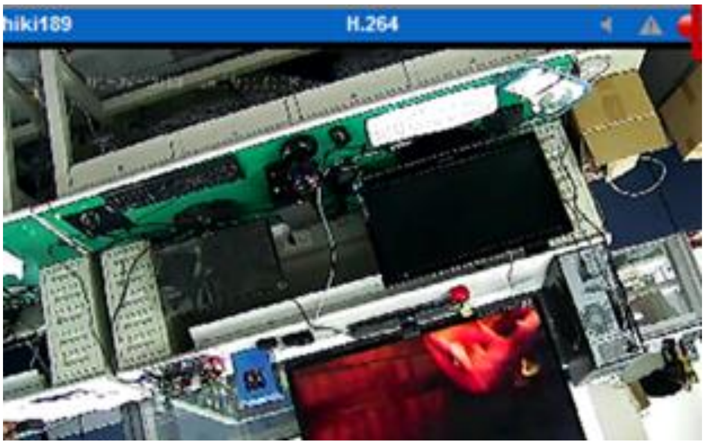
Choose the joystick column and select joystick model then press ‘’**Apply**’’


Option
General
Multi-Server
Sequential Mode Setting
Joystick
OK
Cancel
Apply

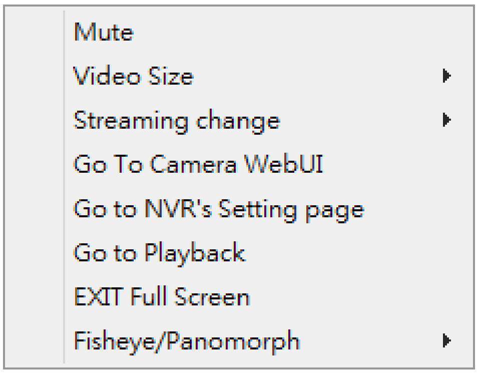
Please select the Joystick

CH PRODUCTS IP DESKTOP CONTROLLER

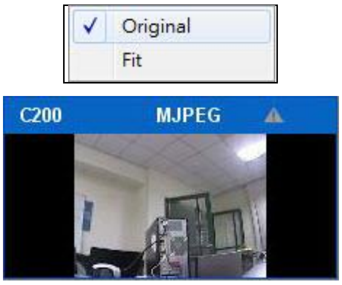
Joystick can work on PTZ cameras as the status bar is with PTZ icon.

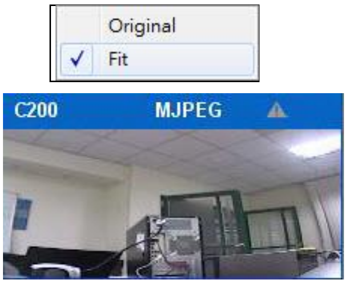

hiki189
H.264

4.1.3 Right Click Functions on Video Window


Mute
Video Size
Streaming change
Go To Camera WebUI
Go to NVR's Setting page
Go to Playback
EXIT Full Screen
Fisheye/Panomorph

1. **Mute:** To mute the audio of the video
2. **Video Size:** Original or Fit


✓ Original
Fit
C200
MJPEG

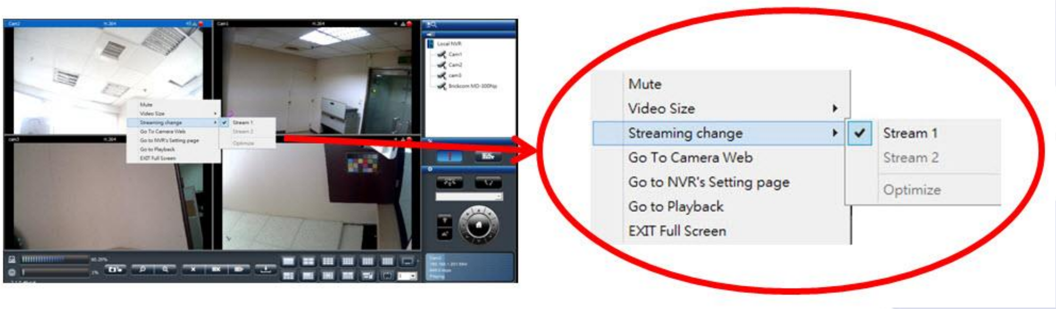

Original
✓ Fit
C200
MJPEG

3. **Streaming change:** To exchange the streaming resource.

(1) Exchange Streaming

NVR allows users to setup the dual streaming configurations in **cameras parameters** page if cameras support dual stream. It is suggested stream 1 is set for higher resolution and stream 2 for lower, which helps users to choose the proper streaming in live view with intuitive control.

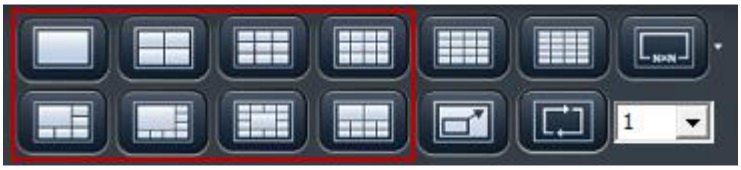
To switch different streaming, users can select the channel in the live view page and right click the mouse to show the list.


Mute
Video Size
Streaming change
Go To Camera Web
Go to NVR's Setting page
Go to Playback
EXIT Full Screen
✓ Stream 1
Stream 2
Optimize

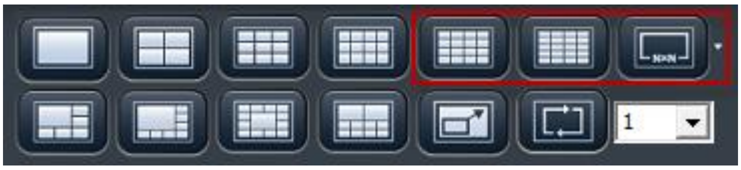
(2) Optimize

When "Optimize" is enable, streaming type will be adjusted automatically for different display modes. When users select the display mode with **more than 16ch**, NVR will automatically change to stream2 for smooth real time viewing experiences.

(1) 1/3/4/5+1/8/9/10/12/12+1-ch display mode:
liveview image automatically show the main stream(stream1)



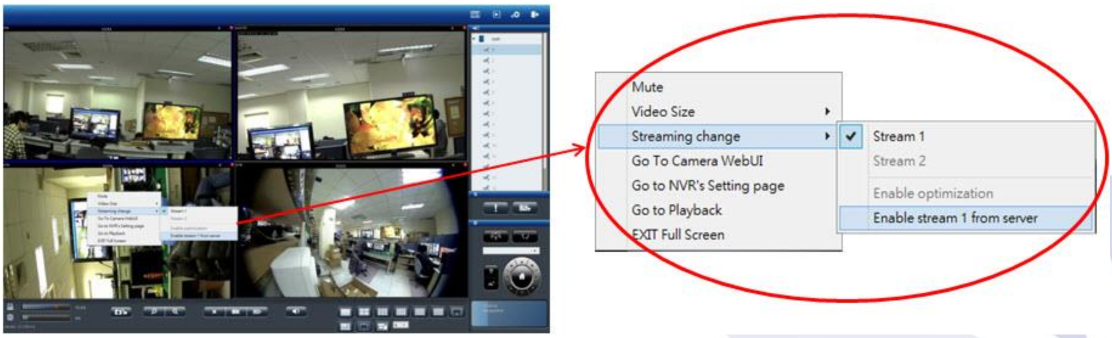
(2) 16/20/25/30/36/42/49/56/64-ch display mode:
liveview image automatically show the sub stream(stream2)



When “Optimize” is disabled, users can manually adjust streaming type, which will be memorized in different display modes.

(2) Stream from Server

In case that NVR performance is violated by camera limitation, stream from server is an optional choice for users to view video images. It is highly recommend to use “**Enable Optimization**” to perform real-time monitoring


Mute
Video Size
Streaming change
Go To Camera WebUI
Go to NVR's Setting page
Go to Playback
EXIT Full Screen
Stream 1
Stream 2
Enable optimization
Enable stream 1 from server

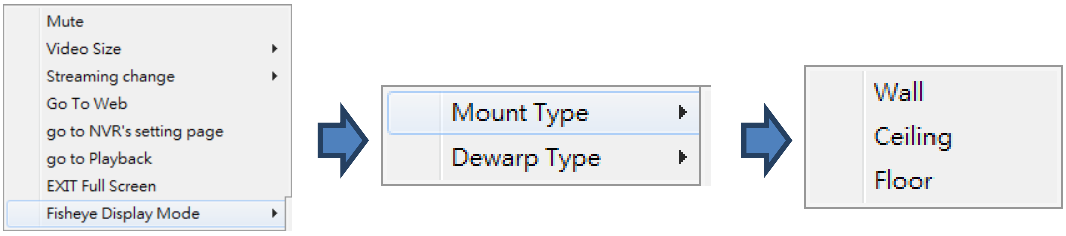
Note: Enable stream 1 from server may influence the efficiency of NVR.

4. **Go To Web**: Go to camera configuration page.
5. **Go to NVR's Setting page:** To open a new browser to camera configuration page.
6. **Go to Playback:** To open a new browser to Playback.
7. **EXIT Full Screen:** To exit full screen

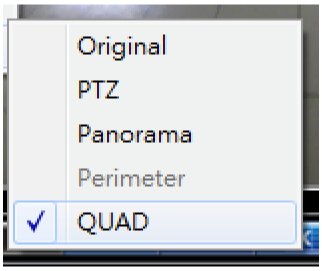
8. **Fisheye Display Mode:** To view the best image quality by choosing use the proper engine of fisheye cameras or cameras with Immervision lenses

(1) Dewarp for fisheye cameras

a. Choose mounting type:

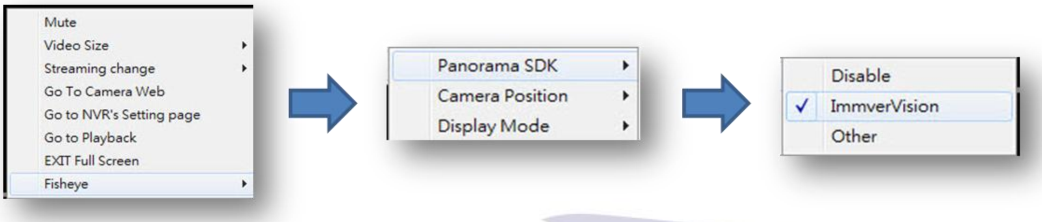

Mute
Video Size
Streaming change
Go To Web
go to NVR's setting page
go to Playback
EXIT Full Screen
Fisheye Display Mode
Mount Type
Dewarp Type
Wall
Ceiling
Floor

b. Choose dewarp Type :

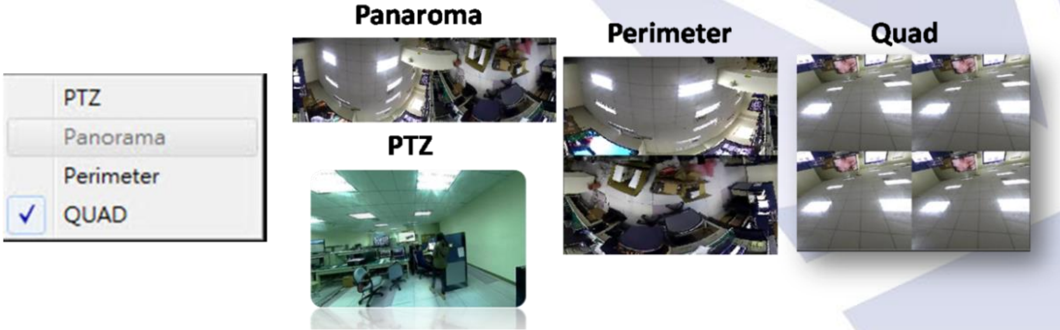

Original
PTZ
Panorama
Perimeter
✓ QUAD

(2) Dewarp for Immervision Lenses

a. Choose dewarp type:


Mute
Video Size
Streaming change
Go To Camera Web
Go to NVR's Setting page
Go to Playback
EXIT Full Screen
Fisheye
Panorama SDK
Camera Position
Display Mode
Disable
✓ ImmverVision
Other

b. Chosse display mode:

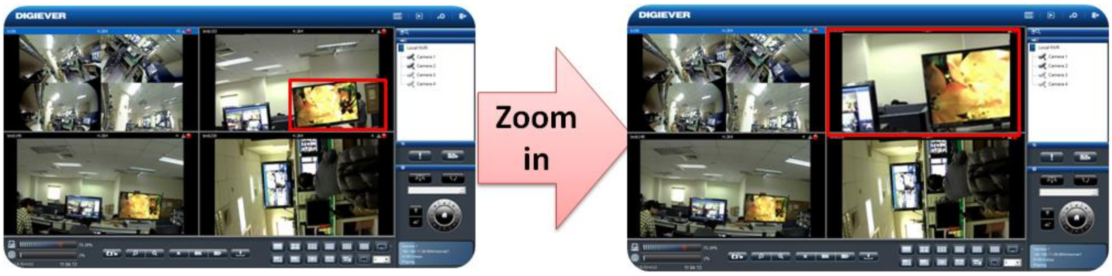

PTZ
Panorama
Perimeter
✓ QUAD
Panaroma
PTZ
Perimeter
Quad

4.1.4 Zooming with Mouse scroll

In addition to digital zoom in/out button, users can use mouse scroll to prevent potential crisis in live-view monitoring.

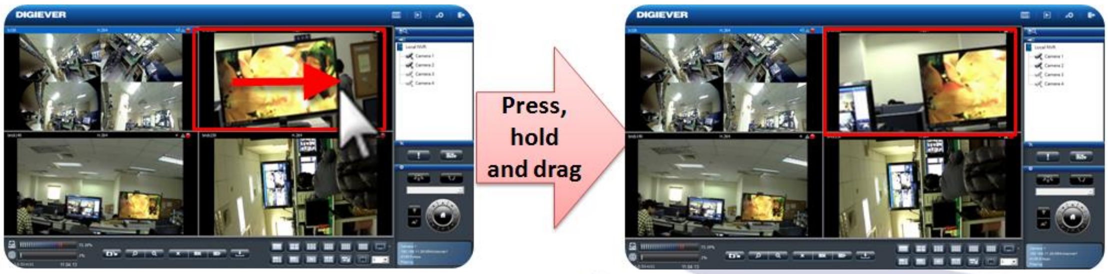
⚠ **Note:** For **PTZ cameras**, zooming with mouse in live-view is adopted optical zoom in/out. If users would like to view more detailed image, please **use zooming with mouse scroll first** and then click **digital zoom in/out button.**

Zoom in/out: To click on the video window and use mouse scroll to enlarge the image.



View enlarged images:

To press and hold left mouse button, drag the image to the place that you would like to monitor.



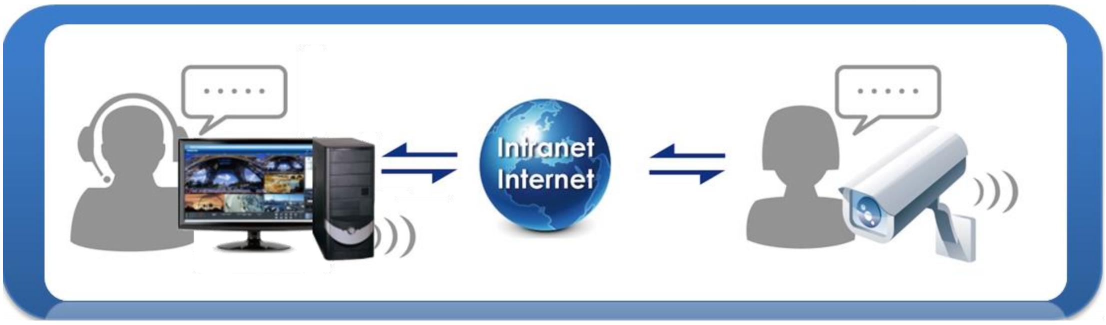
4.1.5 Two-way Audio

Two-way audio allows user to **remotely communicate via PC and IP cameras**, which provides more flexibility in diverse surveillance applications.

Applications:

(1) Via speaker, users can hear sounds captured from remote camera sites to have the latest update.

(2) Via microphone, users can reply it back to remote camera sites.



4.1.6 Built-in Mini-CMS Server

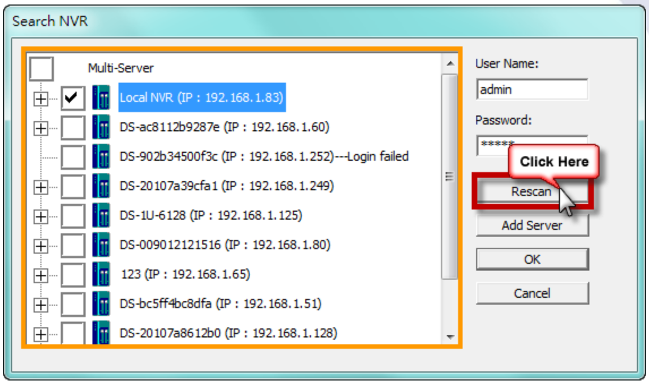
NVR can be a mini-CMS server to connect to other NVR in LAN and WAN by clicking "**Search NVR**" button. It becomes a convenient method to help users protect their regions by simultaneously monitoring other remote sites without installing any other extra VMS software. Users can select a maximum of up to 256 channels to add them into camera list.

1. **Add NVR**

   NVR offer two methods to remotely add other NVRs: Rescan and Add Server

   [Method1] Rescan

   Please click "**Rescan**" button to search NVR in LAN.



Search NVR

☐ Multi-Server
- ☑ Local NVR (IP : 192.168.1.83)
- ☐ DS-ac8112b9287e (IP : 192.168.1.60)
- ☐ DS-902b34500f3c (IP : 192.168.1.252)---Login failed
- ☐ DS-20107a39cfa1 (IP : 192.168.1.249)
- ☐ DS-1U-6128 (IP : 192.168.1.125)
- ☐ DS-009012121516 (IP : 192.168.1.80)
- ☐ 123 (IP : 192.168.1.65)
- ☐ DS-bc5ff4bc8dfa (IP : 192.168.1.51)
- ☐ DS-20107a8612b0 (IP : 192.168.1.128)

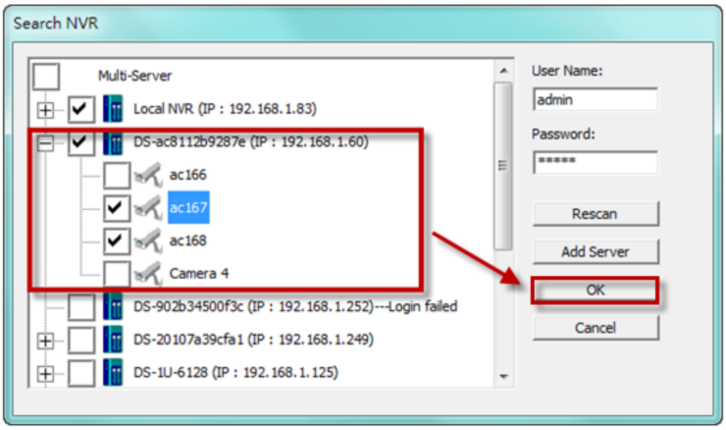
User Name: admin

Password: *****

NVR in LAN will appear, including the local NVR.

⚠ **Note:** Rescan only supports NVR in LAN.

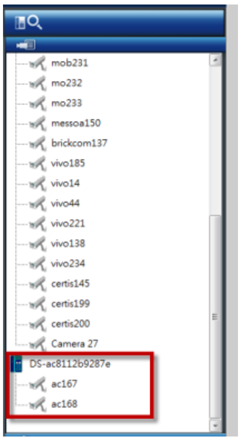
Please choose NVR and camera which you are going to add to the local server and click “**OK**” button.


Search NVR
Multi-Server
Local NVR (IP : 192.168.1.83)
DS-ac8112b9287e (IP : 192.168.1.60)
ac166
ac167
ac168
Camera 4
DS-902b34500f3c (IP : 192.168.1.252)---Login failed
DS-20107a39cfa1 (IP : 192.168.1.249)
DS-1U-6128 (IP : 192.168.1.125)
Rescan
Add Server
OK
Cancel

User Name: admin

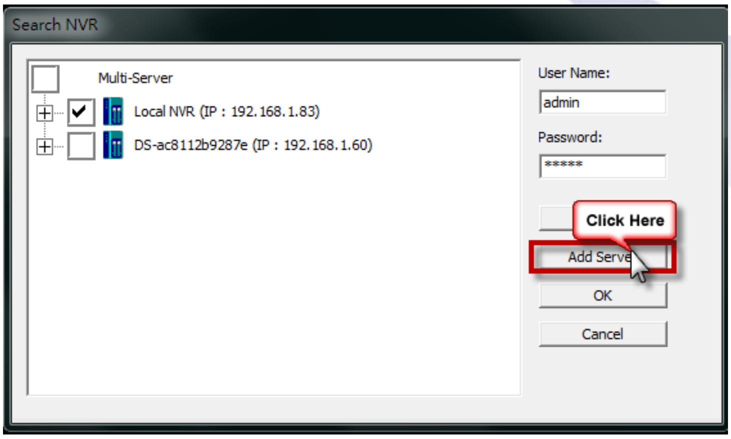
Password: *****

New added channels will display in the cameras list on remote liveview webpage as below.


mob231
mo232
mo233
messoa150
brickcom137
vivo185
vivo14
vivo44
vivo221
vivo138
vivo234
certis145
certis199
certis200
Camera 27
DS-ac8112b9287e
ac167
ac168

[Method2] Add Server

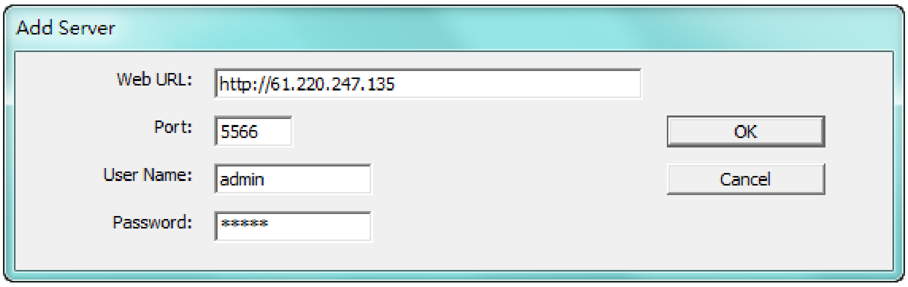
Please click “**Add Server**” button to add NVR.


Search NVR
Multi-Server
Local NVR (IP : 192.168.1.83)
DS-ac8112b9287e (IP : 192.168.1.60)
Click Here
Add Server
OK
Cancel

User Name: admin

Password: *****

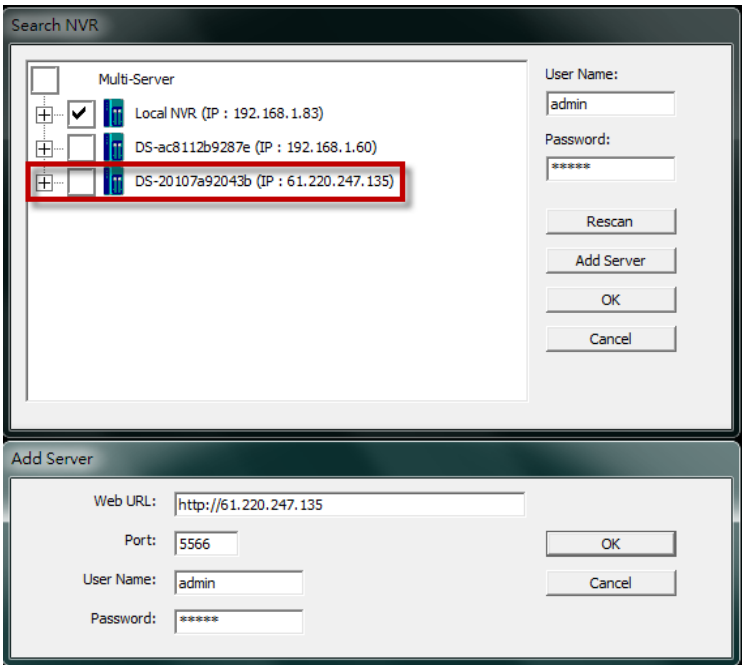
Please enter IP address, port, username and password, then click “**OK**” to apply.


Add Server
OK
Cancel

Web URL: http://61.220.247.135
Port: 5566
User Name: admin
Password: ******

Note: NVR can be manually added in WAN or LAN.

You can see the NVR in mini-CMS list.

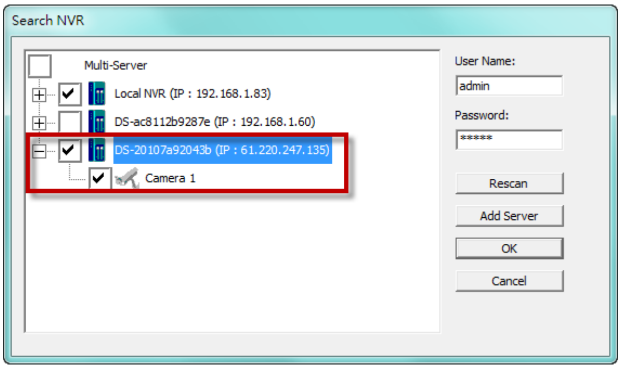

Search NVR
Rescan
Add Server
OK
Cancel
Add Server
OK
Cancel

☐ Multi-Server
☑ Local NVR (IP : 192.168.1.83)
☐ DS-ac8112b9287e (IP : 192.168.1.60)
☐ DS-20107a92043b (IP : 61.220.247.135)

User Name: admin
Password: *****

Web URL: http://61.220.247.135
Port: 5566
User Name: admin
Password: *****

Please choose NVR and camera which you are going to add to the local server and Click “**OK**” button. Then, new added channels will display in the cameras list on remote liveview webpage.

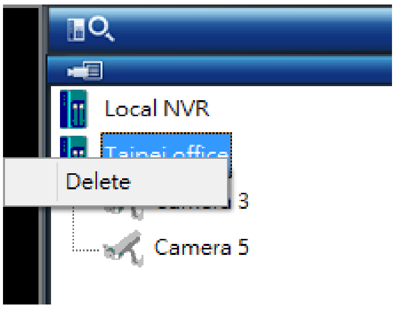

Search NVR
Rescan
Add Server
OK
Cancel

☐ Multi-Server
☑ Local NVR (IP : 192.168.1.83)
☐ DS-ac8112b9287e (IP : 192.168.1.60)
☑ DS-20107a92043b (IP : 61.220.247.135)
☑ Camera 1

User Name: admin
Password: *****

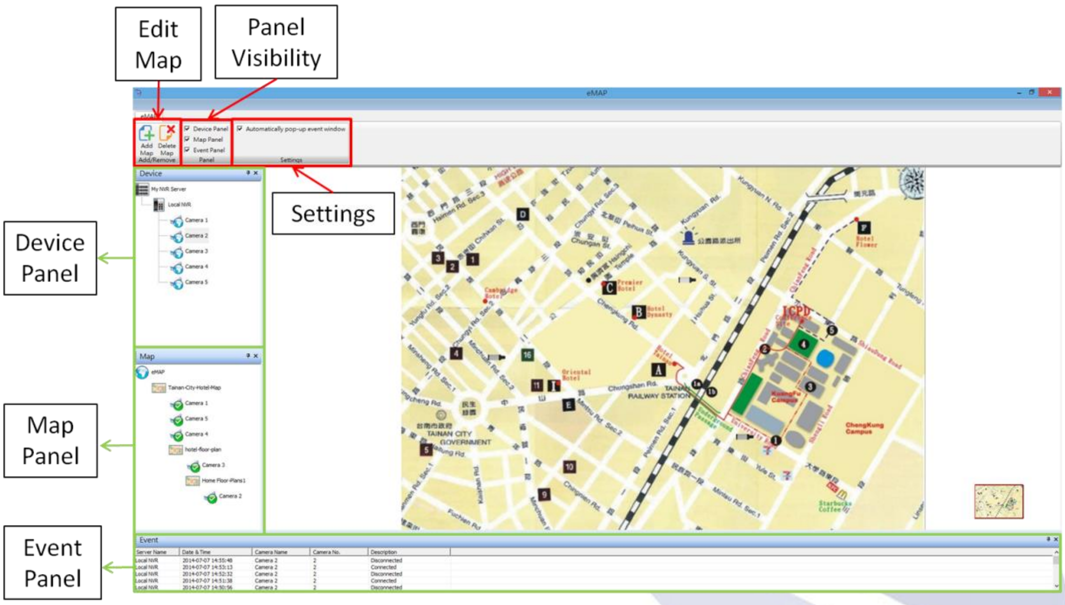
2. Delete NVR

Right-click the NVR on camera list. Click "Delete" to delete NVR

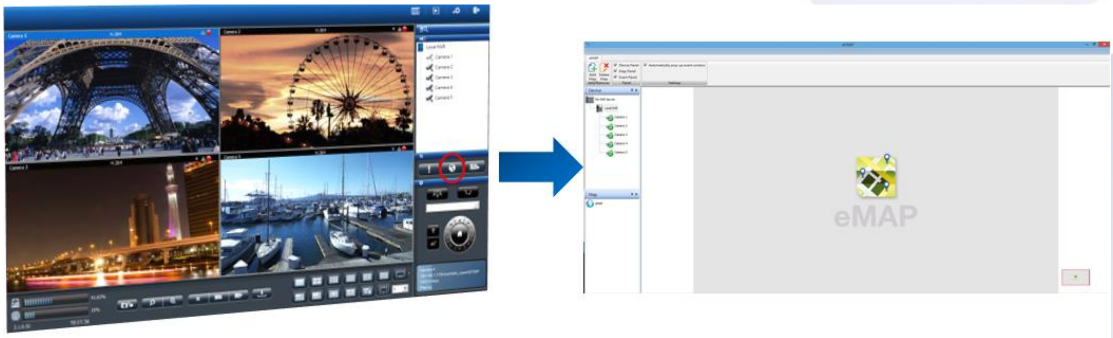

Local NVR
Taipei office
Delete
Camera 3
Camera 5

4.2 Multi-layer Dynamic E-Map

NVR provides **multi-layer E-Map feature** on liveview monitoring as a quick navigation to indicate the physical location of cameras. Users can drag and drop camera icons to multi-layer E-Maps and enable pop-out event window to receive the latest event situation once event occurs.


Edit Map
Panel Visibility
Settings
Device Panel
Map Panel
Event Panel

Please click "**E-Map**" button to start monitoring via dynamic E-Map. An E-Map window will pop-out as below picture.



4.2.1 Feature Introduction

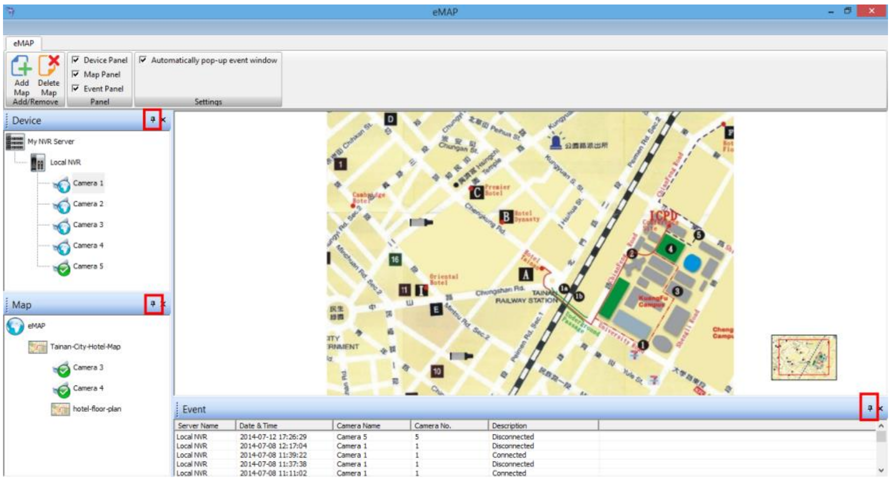
1. Introduction of each column

E-Map offers three columns for general setting: **Edit map**, **Panel visibility** and **Settings.**

Edit map: please refer to 4.2.2 Add or Delete Multi-layer E-Maps for more information.

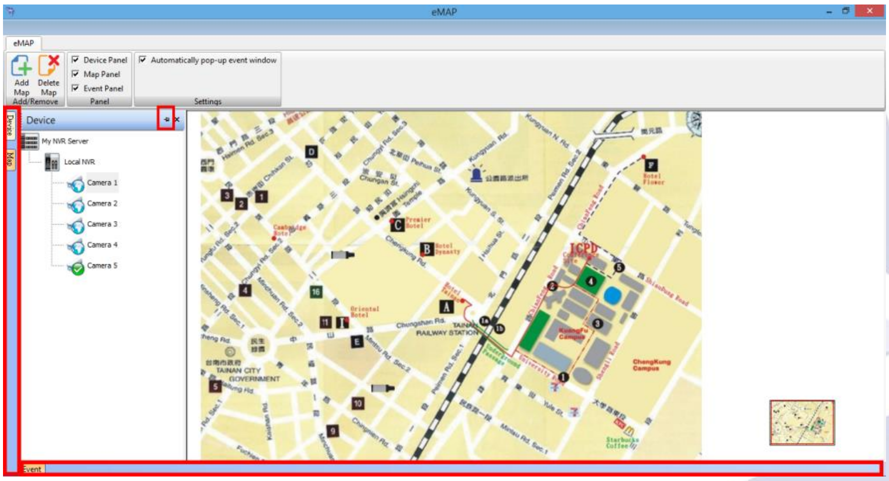
Panel visibility: to decide whether to show or to hide panels, including device panel, map panel and event panel.

<table>
<tr><th>Icon</th><th>Description</th></tr>
<tr><td>📌</td><td>Pin to Fasten: To display and fasten the panel.


eMAP
eMAP
Add Map
Delete Map
Add/Remove
Panel
Settings
Device
My NVR Server
Local NVR
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5
Map
eMAP
Tainan-City-Hotel-Map
Camera 3
Camera 4
hotel-floor-plan
Event

☑ Device Panel
☑ Map Panel
☑ Event Panel
☑ Automatically pop-up event window

<table>
<tr><th>Server Name</th><th>Date & Time</th><th>Camera Name</th><th>Camera No.</th><th>Description</th></tr>
<tr><td>Local NVR</td><td>2014-07-12 17:26:29</td><td>Camera 5</td><td>5</td><td>Disconnected</td></tr>
<tr><td>Local NVR</td><td>2014-07-08 12:17:04</td><td>Camera 1</td><td>1</td><td>Disconnected</td></tr>
<tr><td>Local NVR</td><td>2014-07-08 11:39:22</td><td>Camera 1</td><td>1</td><td>Connected</td></tr>
<tr><td>Local NVR</td><td>2014-07-08 11:37:38</td><td>Camera 1</td><td>1</td><td>Disconnected</td></tr>
<tr><td>Local NVR</td><td>2014-07-08 11:11:02</td><td>Camera 1</td><td>1</td><td>Connected</td></tr>
</table>
</td></tr>
<tr><td>📌</td><td>Pin to Hide: To hide the panel to the edge of the window. Click the panel name to display the panel when needed.


eMAP
eMAP
Add Map
Delete Map
Add/Remove
Panel
Settings
Device
Map
Device
My NVR Server
Local NVR
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5
Event

☑ Device Panel
☑ Map Panel
☑ Event Panel
☑ Automatically pop-up event window
</td></tr>
<tr><td>✕</td><td>Delete:
To close the panel.</td></tr>
</table>

⚠ **Note:** Users can drag the panels to the suitable place.

Settings: to enable or disable automatically pop-up event window. Please refer to 4.2.4 Enable/ Disable Automatically Pop-up Event Window for more information.

2. Introduction of icons

Icon	Description
	Add Map: Add an E-Map
	Delete Map: Delete an E-Map
	Available Camera: Camera in device panel is available to drag to map.
	Camera on Map: Camera in device panel is unable to drag to map since the camera has already added to one of maps.

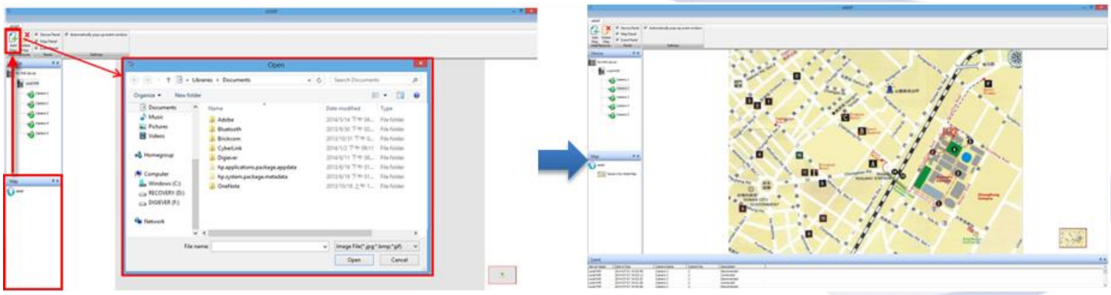
4.2.2 Add or Delete Multi-layer E-Maps

E-Map allows users to expand multi-layer maps in different perspectives and deploy cameras on the maps.

1. Add a Map

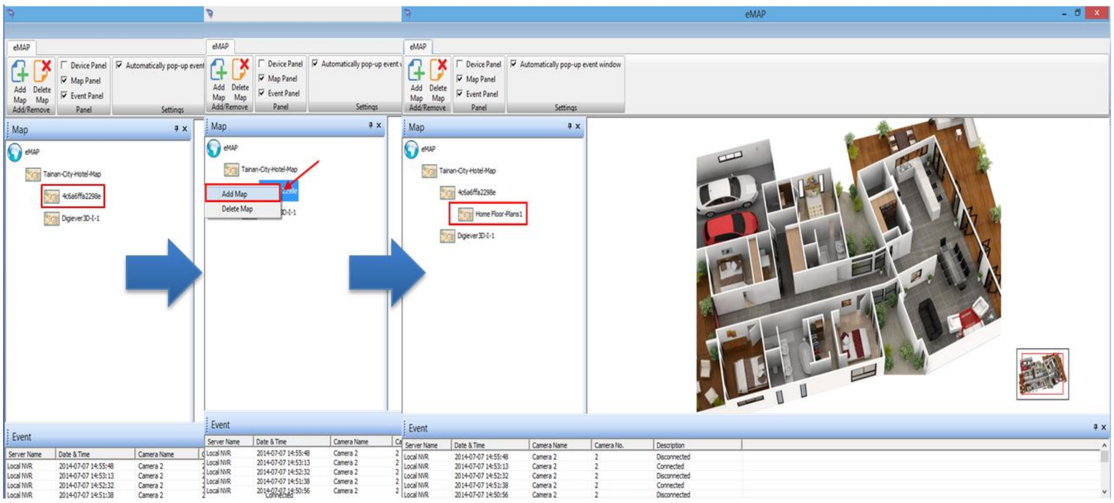
NVR provides two methods to quickly add a map:

(1) Add Map Button: To add a map, please click the map on map panel and click “**Add Map**” button in Add/Delete column to build sub-layer of map. A window will pop out for you to select a map to add in NVR.



Note: The accepted image formats are **PNG**, **BMP** and **JPEG**.

(2) Right-click on Map Panel: Right-click on the map to build sub-layer of map.


eMAP
eMAP
Add Map
Delete Map
Add/Remove
Device Panel
Map Panel
Event Panel
Panel
Automatically pop-up event window
Settings
Map
eMAP
Tainan-City-Hotel-Map
4c6a6ffa2298e
Digiever3D-I-1
Add Map
Delete Map
Home Floor-Plans1
Event

Server Name	Date & Time	Camera Name	Camera No.	Description
Local NVR	2014-07-07 14:55:48	Camera 2	2	Disconnected
Local NVR	2014-07-07 14:53:13	Camera 2	2	Connected
Local NVR	2014-07-07 14:52:32	Camera 2	2	Disconnected
Local NVR	2014-07-07 14:51:38	Camera 2	2	Connected
Local NVR	2014-07-07 14:50:56	Camera 2	2	Disconnected

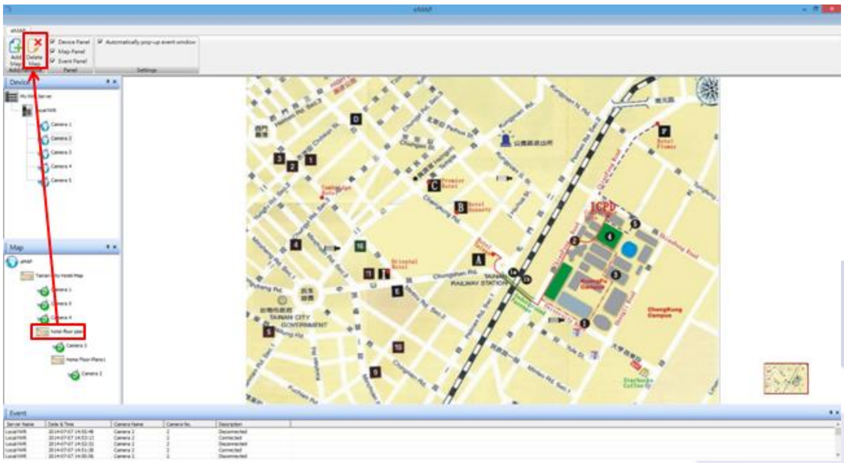
Zoom in / out the E-Map

To zoom in or zoom out the E-Map, users can use the mouse scroll to enlarge or reduce the view of E-Map.

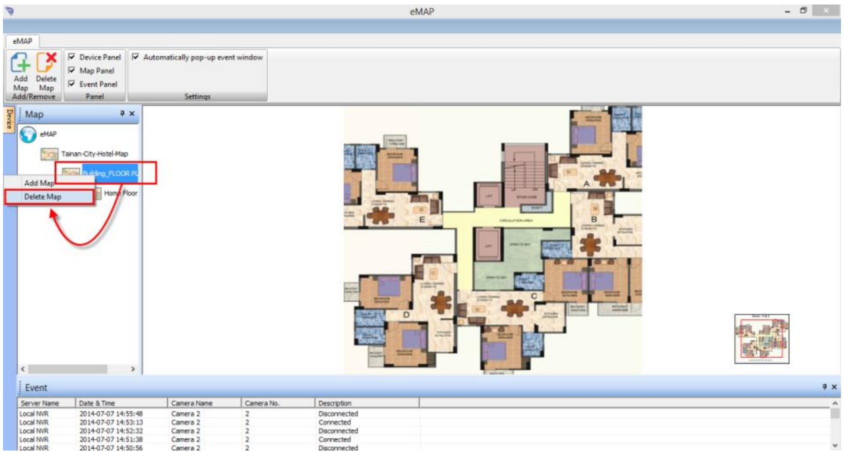
2. Delete a Map

NVR provides two methods to quickly delete map and its camera.

(1) Delete Map Button: Select a map and click "**Delete Map**" button.


eMAP
Add Map
Delete Map
Device Panel
Map Panel
Event Panel
Panel
Automatically pop-up event window
Settings
Device
Map
eMAP
Event

(2) Right-click on Map Panel: Right-click on one of the map to delete the map.


eMAP
eMAP
Add Map
Delete Map
Add/Remove
☑ Device Panel
☑ Map Panel
☑ Event Panel
Panel
☑ Automatically pop-up event window
Settings
Device
Map
eMAP
Tainan-City-Hotel-Map
Building_FLOOR PL
Add Map
Delete Map
Home Floor
A
B
C
D
E
Event

Server Name	Date & Time	Camera Name	Camera No.	Description
Local NVR	2014-07-07 14:55:48	Camera 2	2	Disconnected
Local NVR	2014-07-07 14:53:13	Camera 2	2	Connected
Local NVR	2014-07-07 14:52:32	Camera 2	2	Disconnected
Local NVR	2014-07-07 14:51:38	Camera 2	2	Connected
Local NVR	2014-07-07 14:50:56	Camera 2	2	Disconnected

4.2.3 Deploy Cameras

1. Add and delete camera on the map

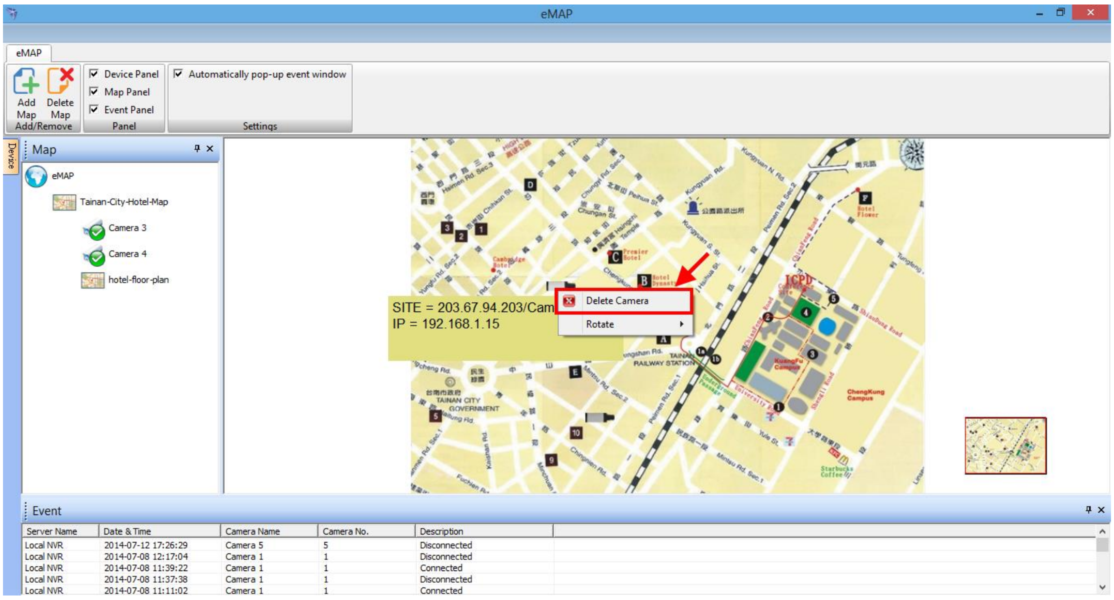
(1) Add a camera: Please drag and drop the camera icons in device list to the map to indicate camera location. After successfully adding camera on the map, camera icon in device pane will turn from (available camera) into (camera on map). A camera icon will be displayed on the map.

Camera Information

When you move the mouse cursor on a camera icon, camera information will display in a yellow column such as **NVR IP address**, **Camera name** and **Camera IP address**.

⚠ **Note:** Users can use the mouse scroll to zoom in/ out the map to enlarge or reduce the view of the E-Map when deploying IP cameras on the map.

(2) Delete a camera: to delete the camera on the map, please right click on the camera icon. A right-click menu will appear. Click “**Delete Camera**” to delete the camera on the map.

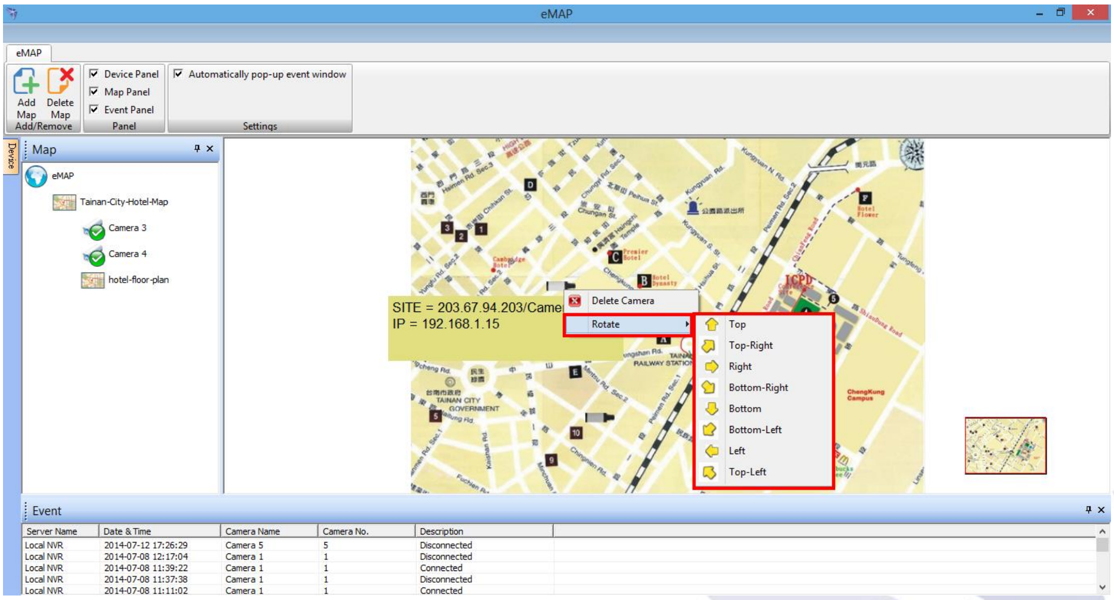

eMAP
Add Map
Delete Map
Add/Remove
☑ Device Panel
☑ Map Panel
☑ Event Panel
Panel
☑ Automatically pop-up event window
Settings
Map
eMAP
Tainan-City-Hotel-Map
Camera 3
Camera 4
hotel-floor-plan
Delete Camera
Rotate
Event

SITE = 203.67.94.203/Cam
IP = 192.168.1.15

Server Name	Date & Time	Camera Name	Camera No.	Description
Local NVR	2014-07-12 17:26:29	Camera 5	5	Disconnected
Local NVR	2014-07-08 12:17:04	Camera 1	1	Disconnected
Local NVR	2014-07-08 11:39:22	Camera 1	1	Connected
Local NVR	2014-07-08 11:37:38	Camera 1	1	Disconnected
Local NVR	2014-07-08 11:11:02	Camera 1	1	Connected

2. Rotate camera direction

Please right click on the camera icon to modify camera direction.

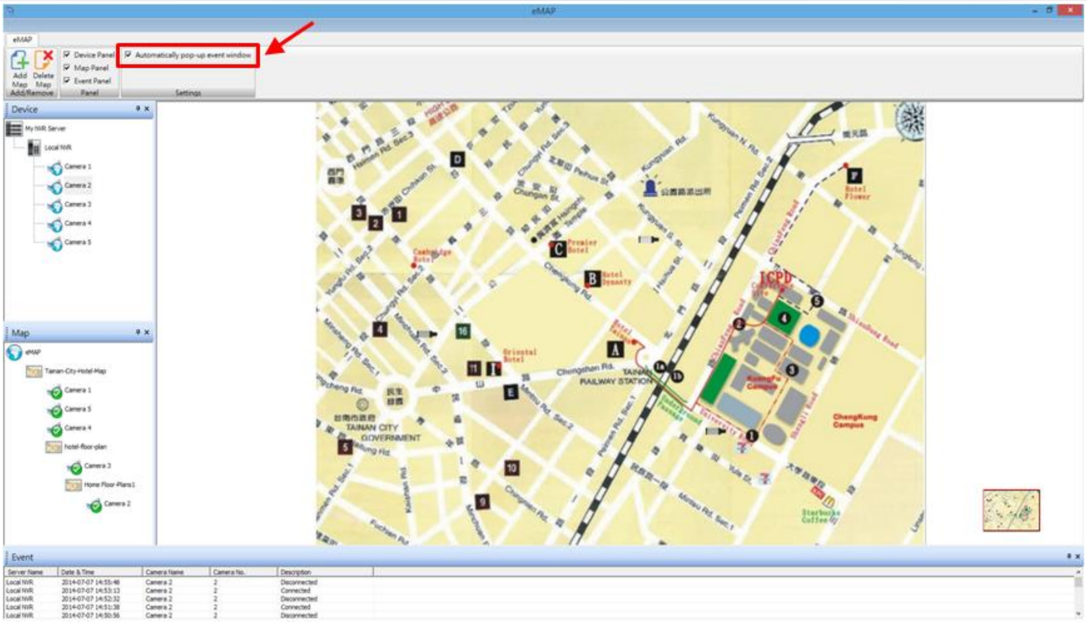

eMAP
Add Map
Delete Map
Add/Remove
☑ Device Panel
☑ Map Panel
☑ Event Panel
Panel
☑ Automatically pop-up event window
Settings
Map
eMAP
Tainan-City-Hotel-Map
Camera 3
Camera 4
hotel-floor-plan
Delete Camera
Rotate
Top
Top-Right
Right
Bottom-Right
Bottom
Bottom-Left
Left
Top-Left
Event

SITE = 203.67.94.203/Came
IP = 192.168.1.15

Server Name	Date & Time	Camera Name	Camera No.	Description
Local NVR	2014-07-12 17:26:29	Camera 5	5	Disconnected
Local NVR	2014-07-08 12:17:04	Camera 1	1	Disconnected
Local NVR	2014-07-08 11:39:22	Camera 1	1	Connected
Local NVR	2014-07-08 11:37:38	Camera 1	1	Disconnected
Local NVR	2014-07-08 11:11:02	Camera 1	1	Connected

4.2.4 Enable/ Disable Automatically Pop-up Event Window

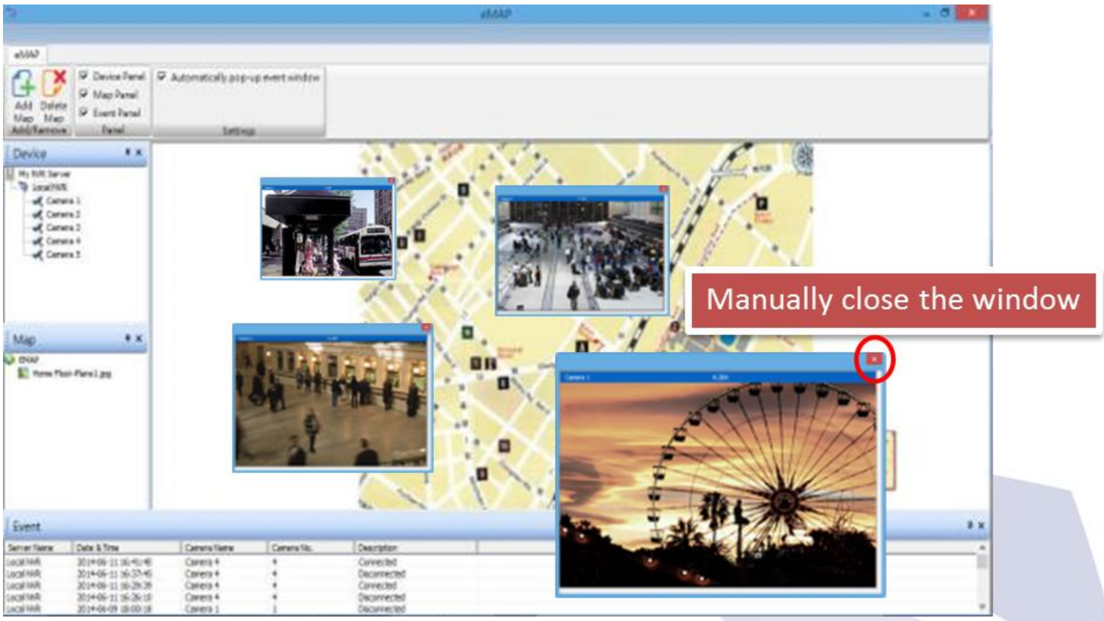
When a motion is triggered from IP camera on the map, a window will pop out to notify users and to display recording video. To enable or disable automatically pop-up event window on E-Map, please click the option.


eMAP
Add Map
Delete Map
Add/Remove
☑ Device Panel
☑ Map Panel
☑ Event Panel
Panel
☑ Automatically pop-up event window
Settings
Device
My NVR Server
Local NVR
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5
Map
eMAP
Tainan-City-Hotel-Map
Camera 1
Camera 5
Camera 4
hotel-floor-plan
Camera 3
Home Floor-Plans1
Camera 2
Event

Server Name	Date & Time	Camera Name	Camera No.	Description
Local NVR	2014-07-07 14:55:48	Camera 2	2	Disconnected
Local NVR	2014-07-07 14:53:13	Camera 2	2	Connected
Local NVR	2014-07-07 14:52:32	Camera 2	2	Disconnected
Local NVR	2014-07-07 14:51:38	Camera 2	2	Connected
Local NVR	2014-07-07 14:50:56	Camera 2	2	Disconnected

⚠ **Note:** The maximum of pop-out event window is 4.

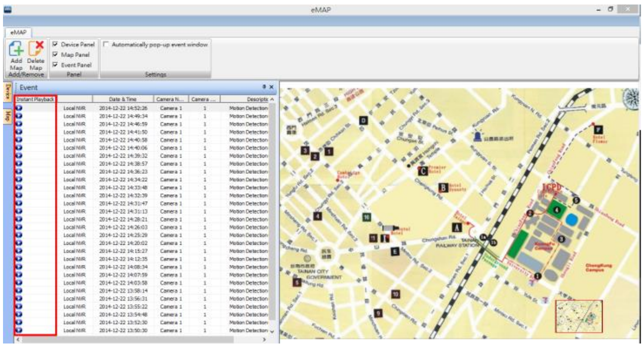
To close the window, users can manually close the pop-out event window.


eMAP
Add Map
Delete Map
Add/Remove
☑ Device Panel
☑ Map Panel
☑ Event Panel
Panel
☑ Automatically pop-up event window
Settings
Device
Map
Event

Manually close the window

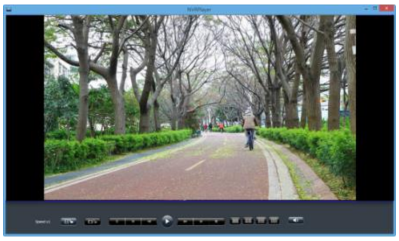
4.2.5 Event Log History

Event log history offers a detailed and latest list of event history in event panel to make users easily control event situation. The event panel includes **Instant Playback**, **Server Name, Date & Time, Camera Name, Camera No.** and **Description** (**Camera Connected**, **Camera Disconnected** or **Motion Detection**.)



☑ Device Panel
☑ Map Panel
☑ Event Panel
☐ Automatically pop-up event window

Instant Playback		Date & Time	Camera N...	Camera ...	Descriptio
▶	Local NVR	2014-12-22 14:52:26	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:49:34	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:46:59	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:41:50	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:40:58	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:40:06	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:39:32	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:38:57	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:36:23	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:34:22	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:33:48	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:32:39	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:31:47	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:31:13	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:28:21	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:26:03	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:25:29	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:20:02	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:15:27	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:12:35	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:08:34	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:07:59	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 14:03:58	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 13:58:14	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 13:56:31	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 13:55:22	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 13:54:48	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 13:52:30	Camera 1	1	Motion Detection
▶	Local NVR	2014-12-22 13:50:30	Camera 1	1	Motion Detection



By clicking ▶ in Instant Playback column, NVRPlayer will pop out to let users view event situation.

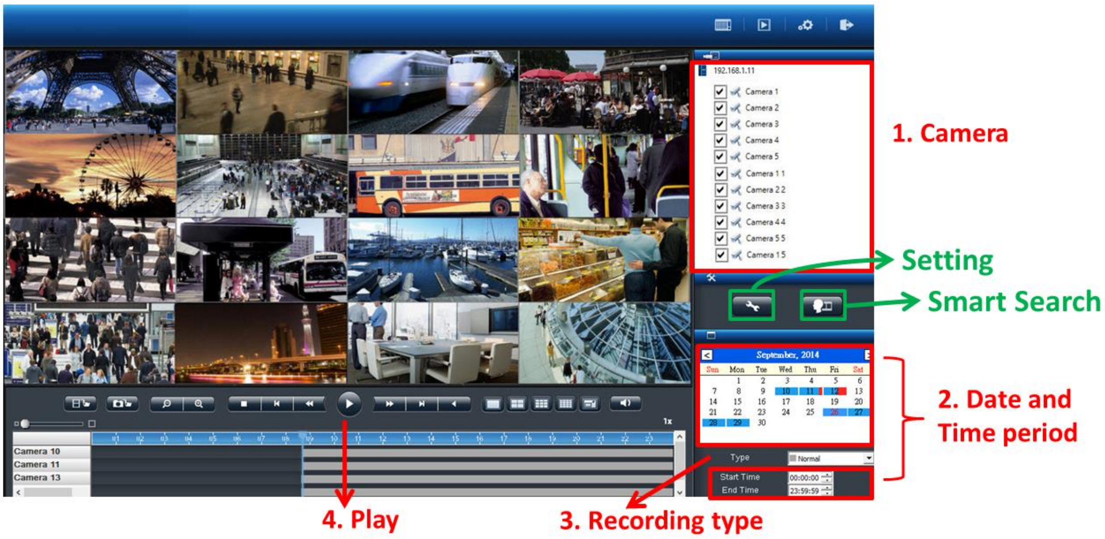
⚠ **Note:** The default length of video clip for instant playback is 6 seconds. Users can edit the length of video clip by visiting configuration page: Recording & Event > Event & Action Management > Advanced Settings

4.3 Playback

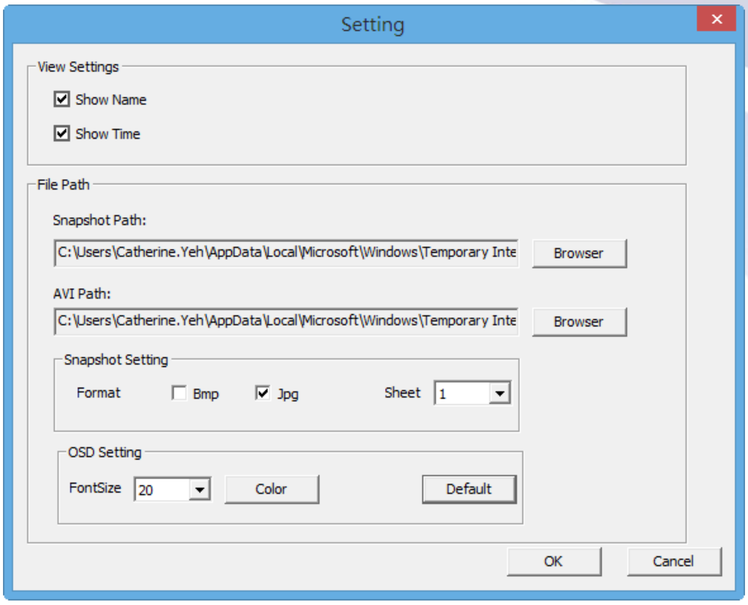
Playback is a function that allows users to view recorded videos from cameras connected to NVR. NVR offers synchronized playback up to 16 cameras and easy steps to help users sort through the recorded videos quickly. Playback video can be viewed in full screen; snapshots can be taken and saved during a video playback.

4.3.1 Steps to Playback Videos

Before viewing recorded videos, "**Setting**" button is offered to set recorded videos for playback.


192.168.1.11
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5
Camera 11
Camera 22
Camera 33
Camera 44
Camera 55
Camera 15
1. Camera
Setting
Smart Search
September, 2014
2. Date and Time period
Type
Normal
Start Time
00:00:00
End Time
23:59:59
Camera 10
Camera 11
Camera 13
4. Play
3. Recording type

- **Setting**: Please click the button to set view settings and file path such as snapshot path and format, AVI path, and OSD setting.



Setting

View Settings

☑ Show Name

☑ Show Time

File Path

Snapshot Path:

C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

Browser

AVI Path:

C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

Browser

Snapshot Setting

Format ☐ Bmp ☑ Jpg Sheet 1

OSD Setting

FontSize 20 Color Default

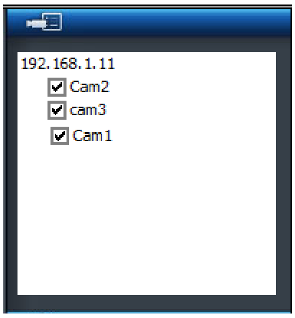
OK Cancel

Please follow four steps below to quickly search recorded videos:

1. Select cameras from camera list
2. Select date and time period
3. Select recording type
4. Click “Play”

1. Select cameras from camera list

Please select channel number from channel list to search recorded videos. Up to 4 channels can be selected at the same time.



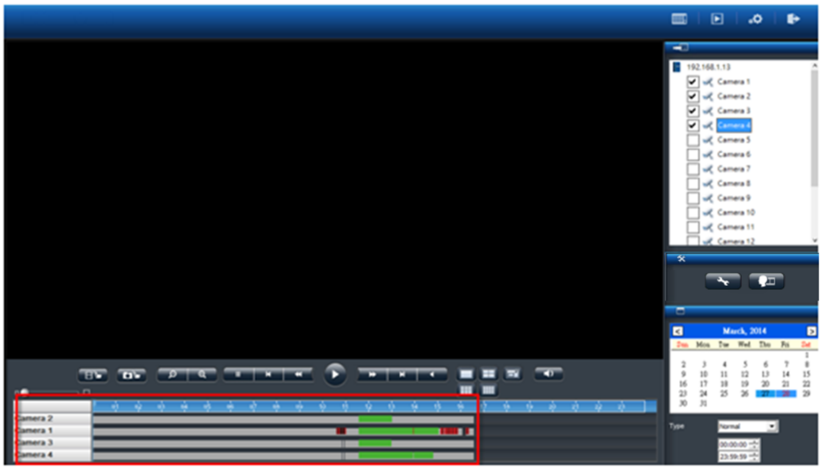
192.168.1.11

☑ Cam2

☑ cam3

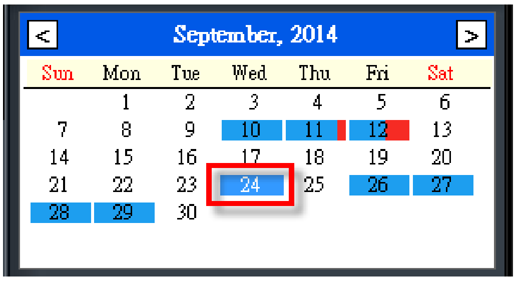
☑ Cam1

Once the camera is selected, the time line will be shown on time table


192.168.1.13
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5
Camera 6
Camera 7
Camera 8
Camera 9
Camera 10
Camera 11
Camera 12
March, 2014
Type
Normal
Camera 2
Camera 1
Camera 3
Camera 4

2. Select date and time

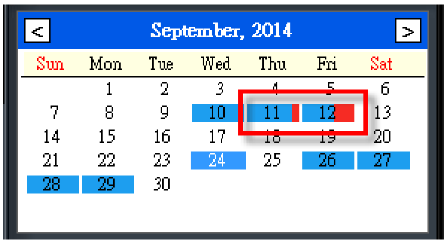
Please select the date to search recorded videos. The date marked in blue background and white words has recorded video.



< September, 2014 >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

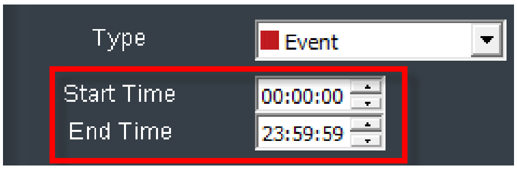
If there is an event recording in the specific date, the date will be remarked as blue with red stripe aside.



September, 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Users can also select specific time period from time searching list (start time to end time.) Start time and end time layout is **Hour: Minute: Second**.



Type: Event

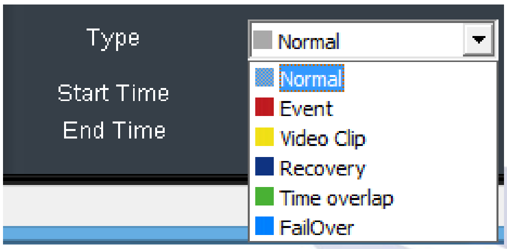
Start Time: 00:00:00

End Time: 23:59:59

The default time period is from 00:00:00 to 23:59:59.

3. Select recording type

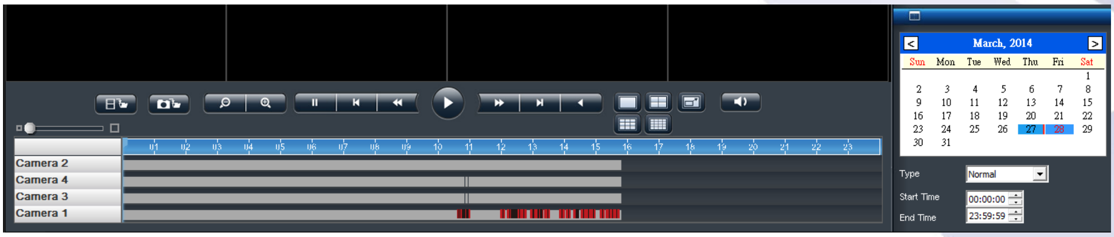
Users can select five types of video file which is also displayed in Time table.
These five types of video file are distinguished from different colors in time table: **Normal(Gray)**, **Event(Red)**, **Video Clip(Yellow)**, **Recovery(Blue)**, **Time overlap(Green)** and **Failover(Light Blue)**.



Type: Normal

Start Time
End Time
Normal
Event
Video Clip
Recovery
Time overlap
FailOver

With the changing of recording types, time table will present in different color in remote browser.



Camera 2
Camera 4
Camera 3
Camera 1
March, 2014
Sun
Mon
Tue
Wed
Thu
Fri
Sat

Type: Normal

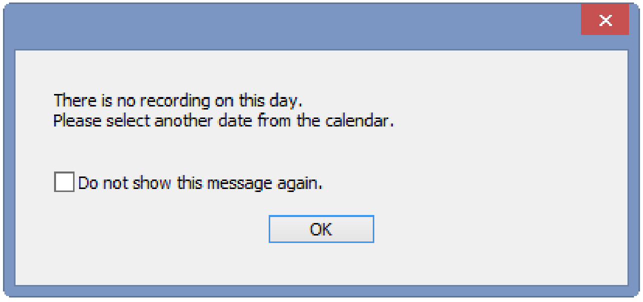
Start Time: 00:00:00

End Time: 23:59:59

4. Click “Play”

Please click the play button ▶ to start playback.

⚠ **Note:** A window will pop up when there is no recorded file at that day.



There is no recording on this day.
Please select another date from the calendar.

☐ Do not show this message again.

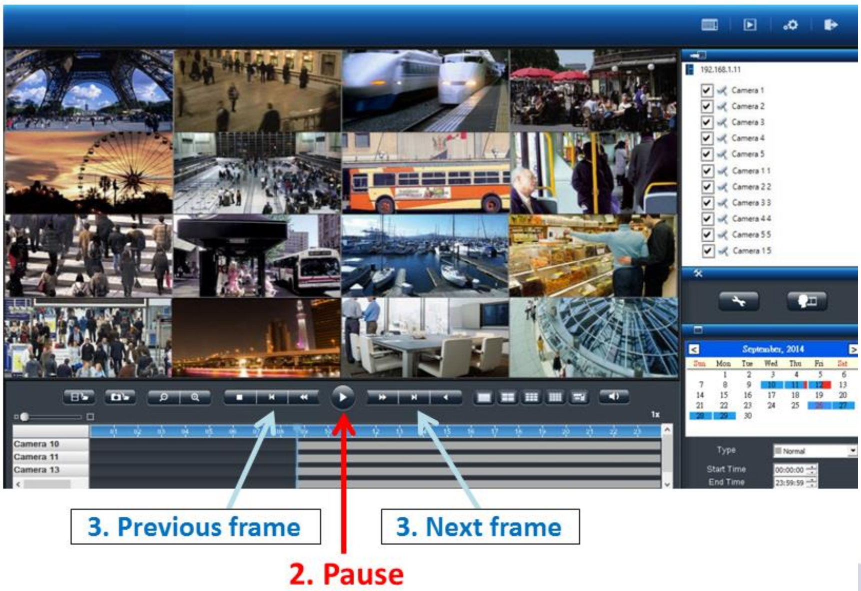
⚠ Note: the option of Do not show this message again will be disable when users complete close remote browser.

Frame by Frame Playback

1 Follow above four steps to playback

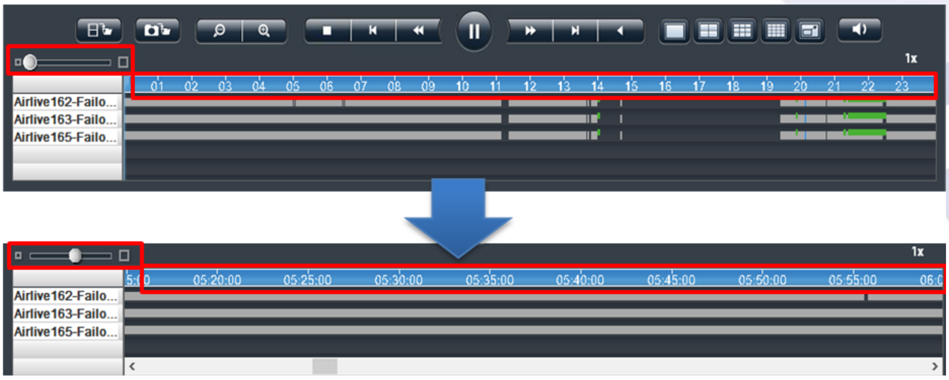
2 Click “**Pause**” button

3 Click “**Previous frame**” or “**Next frame**” button


3. Previous frame
3. Next frame
2. Pause

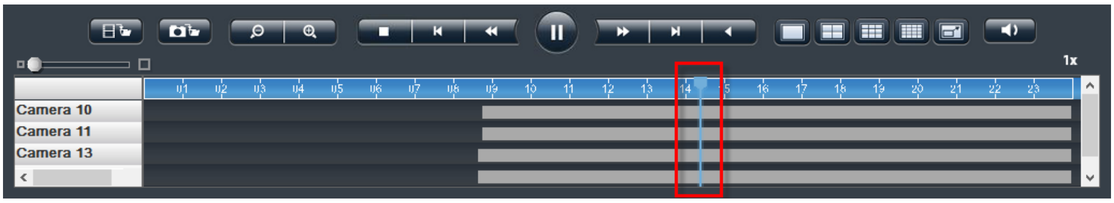
- **Scale bar**

Users can move the bar to enlarge or narrow down time period to check video footage in time table.


1x
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Airlive162-Failo...
Airlive163-Failo...
Airlive165-Failo...
05:20:00 05:25:00 05:30:00 05:35:00 05:40:00 05:45:00 05:50:00 05:55:00

- **Seek bar**

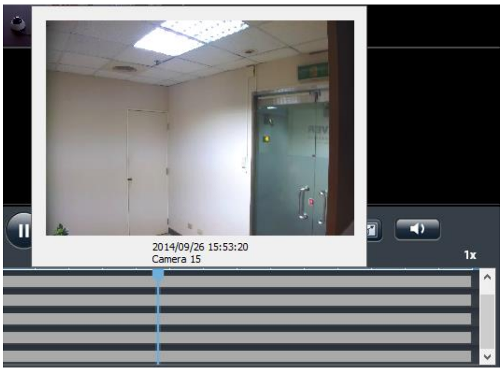
By moving seek bar, users can go to the specific recording time directly. Time is shown above seek bar to provide time reference.


1x
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
Camera 10
Camera 11
Camera 13

- **Thumbnail on Playback**

With thumbnail function on playback, users can move the pointer of the mouse over the footage and the snapshot of the specific time will be shown. It helps users easier to locate the period of time for play the recorded videos.

From the thumbnail, users can also read the related information such as date, time and camera name.


2014/09/26 15:53:20
Camera 15
1x

The thumbnail will be shown while pointer moves on the footage.

4.3.2 Description of Recording Types

1. **Normal (gray):**

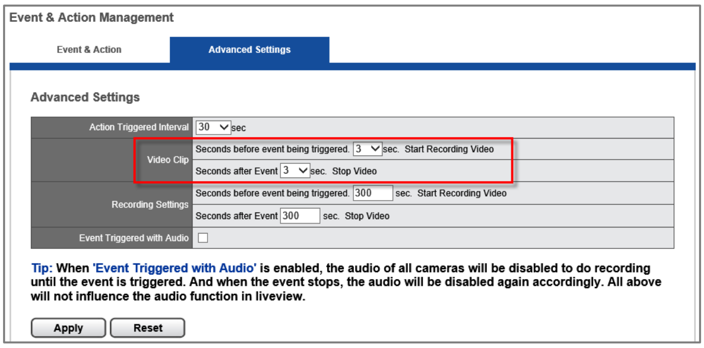
   Normal Record means there is no special conditions happened such as event, time overlap. It helps users to know at that time whether NVR has recorded videos or not.

2. **Event (red):**

   Event means at least an event is triggered at that time, which helps users to efficiently find event recoded videos. To save videos in event type of recording videos, please set up event setting in advance. For more information, please refer to **5.2.3 Event & Action Management**

3. **Video Clip (yellow):**

   Video Clip means a brief video clip set by user to manage on event triggered recording file, allowing to be sent by E-mail as well and user can change the Pre-time (up to 10 sec.) and Post-time (up to 10 sec.) in Configuration Page> Recording & Event> Event & Action Management > Advanced Settings as below:



Action Triggered Interval 30 sec

Video Clip
Seconds before event being triggered. 3 sec. Start Recording Video
Seconds after Event 3 sec. Stop Video

Recording Settings
Seconds before event being triggered. 300 sec. Start Recording Video
Seconds after Event 300 sec. Stop Video

Event Triggered with Audio ☐

Tip: When 'Event Triggered with Audio' is enabled, the audio of all cameras will be disabled to do recording until the event is triggered. And when the event stops, the audio will be disabled again accordingly. All above will not influence the audio function in liveview.

4. **Recovery (blue):**

   Recovery file is generated once the NVR server resumes working once the power electric back. This is special unique and advanced feature of NVR.

   For an example, when the premises was broken into and the main power switch was cut, there was a period of critical time of recording files were captured by IP camera but it was not insufficient time to be converted the temp video files to be wrote into hard disk drive. Once the NVR server gets power resume, the NVR is able to generate a so-called Recovered File and save on hard disk drive. User can then find out the critical evidence clips if the camera successful captured the scenario.

5. **Time Overlap (green):**

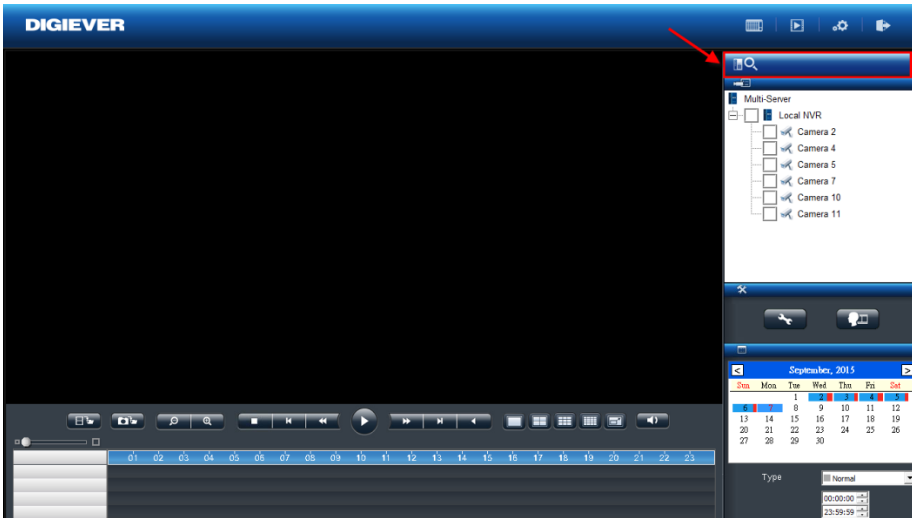
   Time Overlap file is generated once NVR server's time is changed during recording task. For examples, using NVR's built-in NTP server to synchronize a required time, or alter the NVR server time manually, or change the time zone and enable daylight saving time.

6. **Failover (light blue)**:

   Failover means videos are recorded in failover server.

4.3.3 Multi-NVR Playback

Multi-NVR playback allows users to cross multiple NVRs to playback up to 16-channel of videos. Users can easily obtain the path of moving objects via tracking videos from multiple sites of NVR. During executing Multi-NVR playback, users can also export videos and take a snapshot.

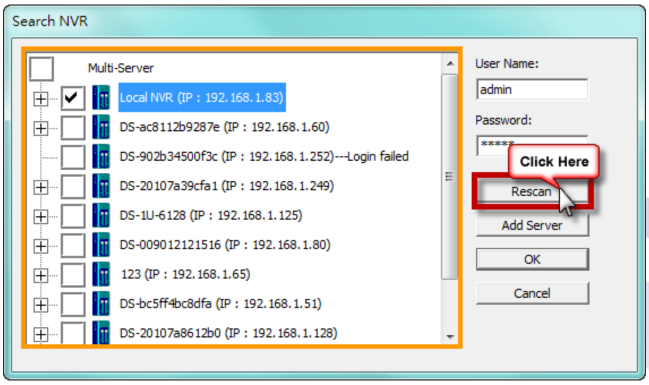

DIGIEVER
Multi-Server
Local NVR
Camera 2
Camera 4
Camera 5
Camera 7
Camera 10
Camera 11
September, 2015
Sun Mon Tue Wed Thu Fri Sat
Type
Normal
00:00:00
23:59:59

1. **Search NVR**

   NVR offer two methods to remotely add other NVRs: **Rescan** and **Add Server**

   [Method1] Rescan

   Please click “**Rescan**” button to search NVR in LAN.



Search NVR

Multi-Server
- ☑ Local NVR (IP : 192.168.1.83)
- ☐ DS-ac8112b9287e (IP : 192.168.1.60)
- ☐ DS-902b34500f3c (IP : 192.168.1.252)---Login failed
- ☐ DS-20107a39cfa1 (IP : 192.168.1.249)
- ☐ DS-1U-6128 (IP : 192.168.1.125)
- ☐ DS-009012121516 (IP : 192.168.1.80)
- ☐ 123 (IP : 192.168.1.65)
- ☐ DS-bc5ff4bc8dfa (IP : 192.168.1.51)
- ☐ DS-20107a8612b0 (IP : 192.168.1.128)

User Name: admin

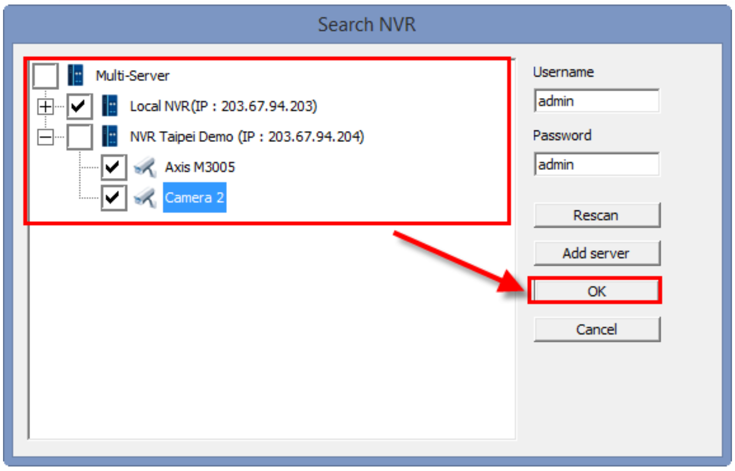
Password: *****

Click Here
Rescan
Add Server
OK
Cancel

NVR in LAN will appear, including the local NVR.

⚠ **Note:** Rescan only supports NVR in LAN.

Please choose NVR and camera which you are going to add to the local server and click “**OK**” button.



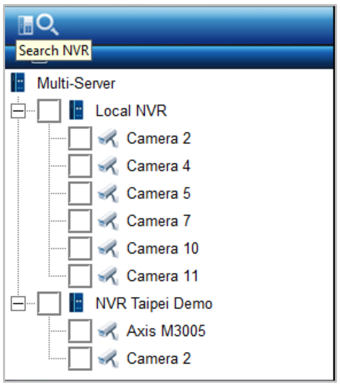
Search NVR
Rescan
Add server
OK
Cancel

☐ Multi-Server
☑ Local NVR(IP : 203.67.94.203)
☐ NVR Taipei Demo (IP : 203.67.94.204)
  ☑ Axis M3005
  ☑ Camera 2

Username: admin

Password: admin

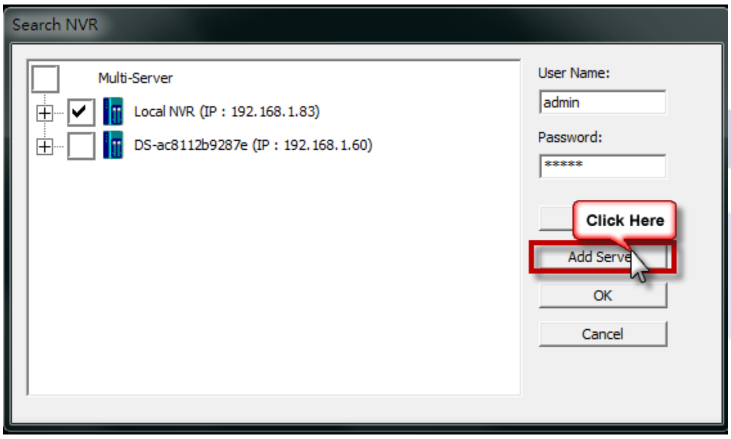
New added channels will display in the cameras list as below.



Multi-Server
☐ Local NVR
  ☐ Camera 2
  ☐ Camera 4
  ☐ Camera 5
  ☐ Camera 7
  ☐ Camera 10
  ☐ Camera 11
☐ NVR Taipei Demo
  ☐ Axis M3005
  ☐ Camera 2

[Method2] Add Server

Please click “**Add Server**” button to add NVR.



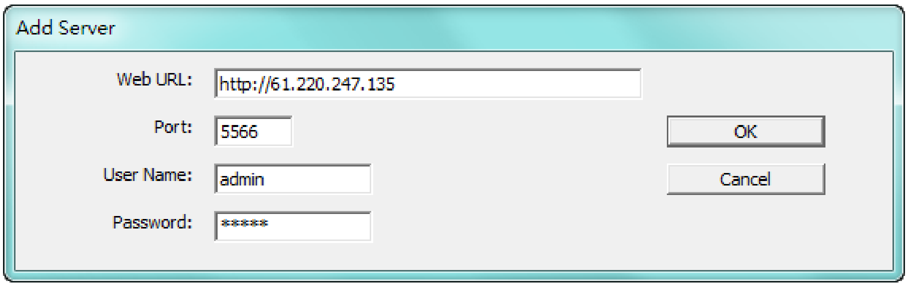
Search NVR
Click Here
Add Server
OK
Cancel

☐ Multi-Server
☑ Local NVR (IP : 192.168.1.83)
☐ DS-ac8112b9287e (IP : 192.168.1.60)

User Name: admin

Password: *****

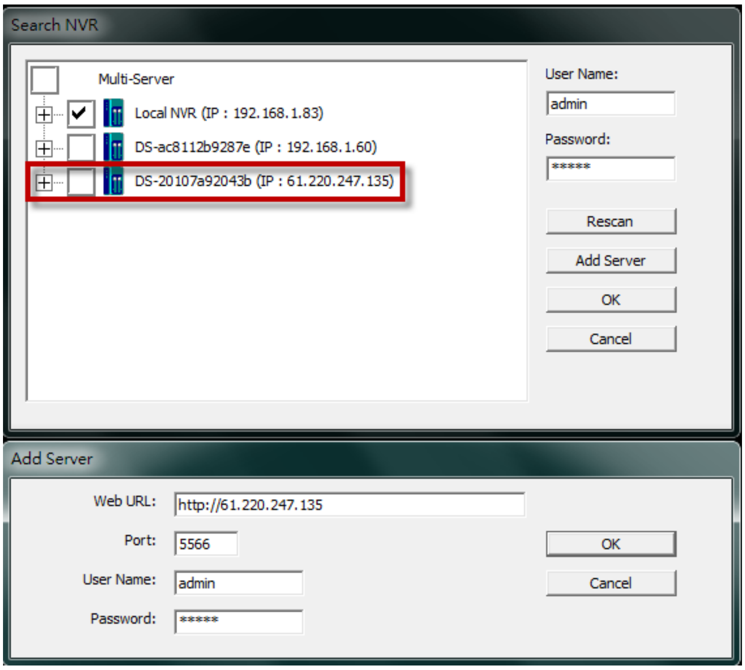
Please enter IP address, port, username and password, then click “**OK**” to apply.


Add Server
OK
Cancel

Web URL: http://61.220.247.135
Port: 5566
User Name: admin
Password: ******

Note: NVR can be manually added in WAN or LAN.

You can see the NVR in the list.

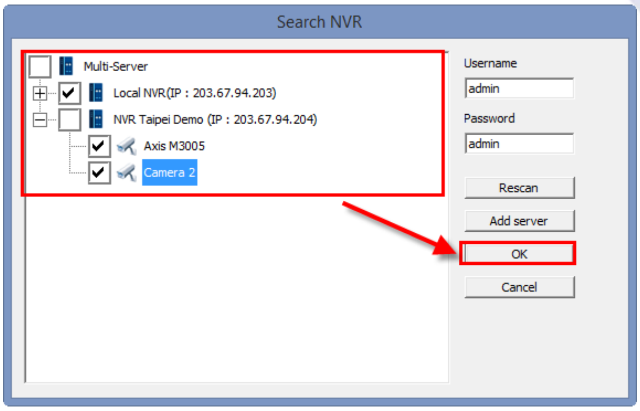

Search NVR
Rescan
Add Server
OK
Cancel
Add Server
OK
Cancel

☐ Multi-Server
☑ Local NVR (IP : 192.168.1.83)
☐ DS-ac8112b9287e (IP : 192.168.1.60)
☐ DS-20107a92043b (IP : 61.220.247.135)

User Name: admin
Password: *****

Web URL: http://61.220.247.135
Port: 5566
User Name: admin
Password: *****

Please choose NVR and camera which you are going to add to the local server and Click “**OK**” button. Then, new added channels will display in the cameras list.

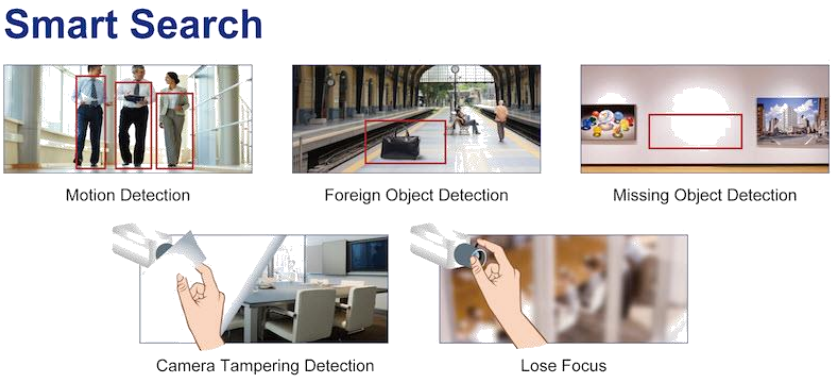

Search NVR
Rescan
Add server
OK
Cancel

☐ Multi-Server
☑ Local NVR(IP : 203.67.94.203)
☐ NVR Taipei Demo (IP : 203.67.94.204)
☑ Axis M3005
☑ Camera 2

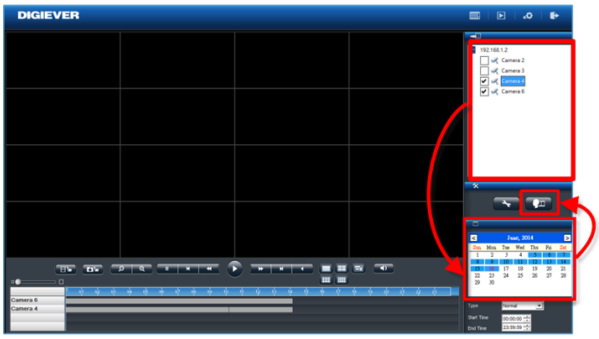
Username: admin
Password: admin

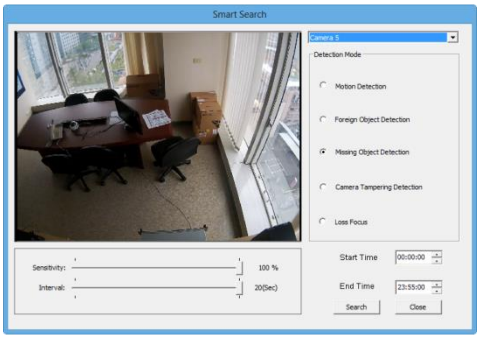
4.3.4 Smart Search

Smart Search can efficiently save users' precious time to find out key video moment without wasting extra effort and energy. Smart Search offers five quick search modes: **motion detection, foreign object detection, missing object detection, camera tampering detection** and **lose focus**.


Smart Search
Motion Detection
Foreign Object Detection
Missing Object Detection
Camera Tampering Detection
Lose Focus

Please select cameras from camera list and the date that you would like to execute smart search. Then, click "**Smart Search**" button. A window will pop up to start smart search configuration.


DIGIEVER
192.168.1.2
Camera 2
Camera 3
Camera 4
Camera 6
June, 2014
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Camera 6
Camera 4


Smart Search
Detection Mode
Motion Detection
Foreign Object Detection
Camera Tampering Detection
Loss Focus
Search
Close

Camera 5

● Missing Object Detection

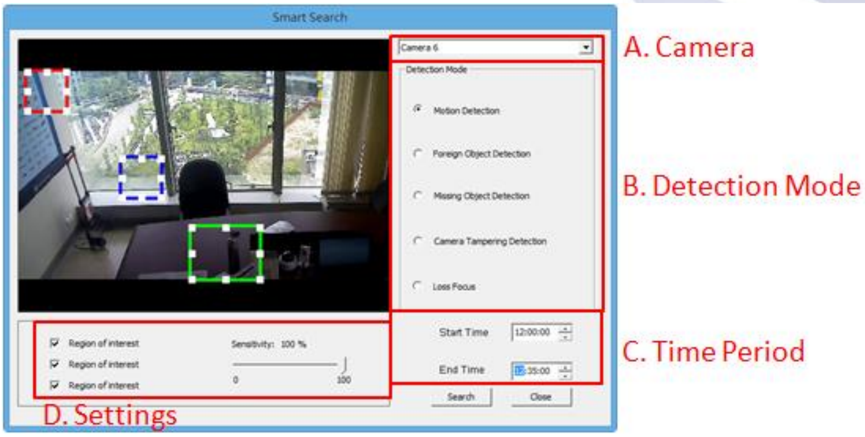
Sensitivity: 100 %

Interval: 20(Sec)

Start Time 00:00:00

End Time 23:55:00

Select **a specific camera**, **detection mode**, **time period** and **settings.** Then, click "**Search**" button to start smart search.


Smart Search
A. Camera
B. Detection Mode
C. Time Period
D. Settings
Detection Mode
Foreign Object Detection
Missing Object Detection
Camera Tampering Detection
Loss Focus
End Time
Search
Close
0
100

Camera 6

● Motion Detection

☑ Region of interest

☑ Region of interest

☑ Region of interest

Sensitivity: 100 %

Start Time 12:00:00

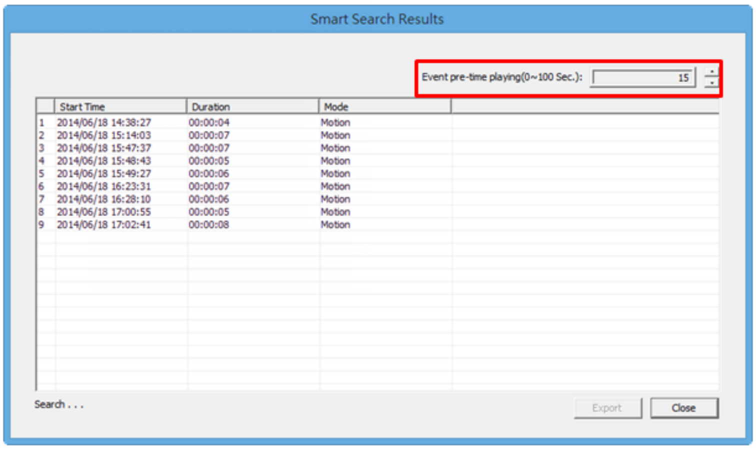
Introduction of settings:

(1) Region of interest: the location for quick detection

⚠ **Note: Motion detection**, **foreign object detection** and **missing object detection** is needed to arrange region of interest. Except motion detection which has 3 region of interest, others one have one region of interest.)

(2) Sensibility: the capability to detect event

(3) Interval: the amount of time that the object exists in the region

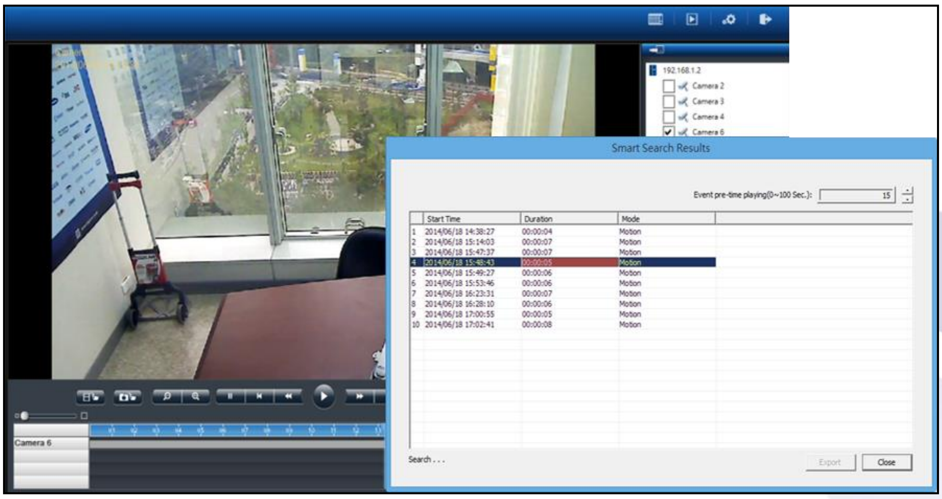


Event pre-time playing(0~100 Sec.): 15

	Start Time	Duration	Mode
1	2014/06/18 14:38:27	00:00:04	Motion
2	2014/06/18 15:14:03	00:00:07	Motion
3	2014/06/18 15:47:37	00:00:07	Motion
4	2014/06/18 15:48:43	00:00:05	Motion
5	2014/06/18 15:49:27	00:00:06	Motion
6	2014/06/18 16:23:31	00:00:07	Motion
7	2014/06/18 16:28:10	00:00:06	Motion
8	2014/06/18 17:00:55	00:00:05	Motion
9	2014/06/18 17:02:41	00:00:08	Motion

The smart search result window will pop-out. Users can set up **event pre-time playing** to playback the video before the event

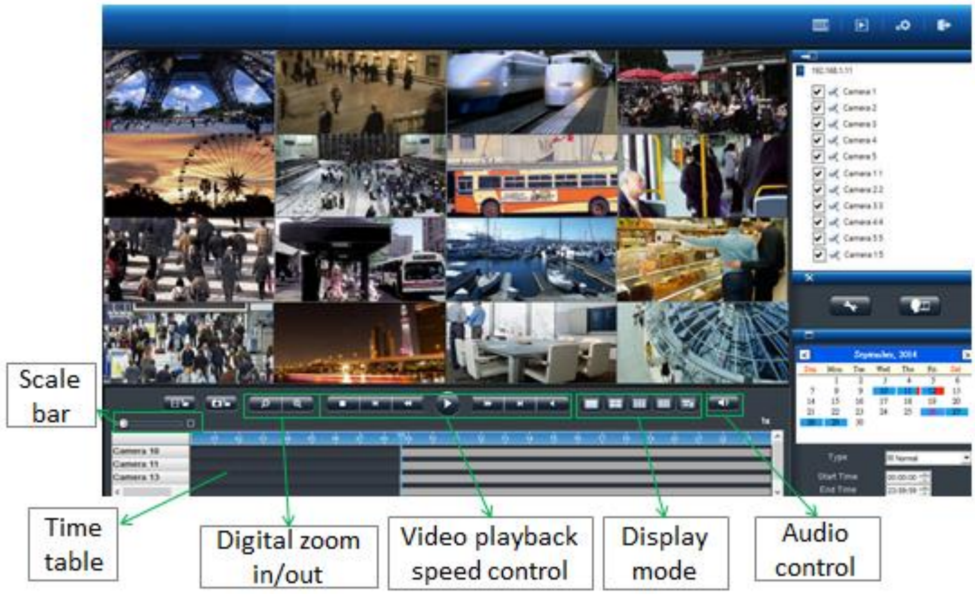
Please double-click on one of the smart search result to play the video.



Event pre-time playing(0~100 Sec.): 15

	Start Time	Duration	Mode
1	2014/06/18 14:38:27	00:00:04	Motion
2	2014/06/18 15:14:03	00:00:07	Motion
3	2014/06/18 15:47:37	00:00:07	Motion
4	2014/06/18 15:48:43	00:00:05	Motion
5	2014/06/18 15:49:27	00:00:06	Motion
6	2014/06/18 15:53:46	00:00:06	Motion
7	2014/06/18 16:23:31	00:00:07	Motion
8	2014/06/18 16:28:10	00:00:06	Motion
9	2014/06/18 17:00:55	00:00:05	Motion
10	2014/06/18 17:02:41	00:00:08	Motion

4.3.5 Main Functions on Playback

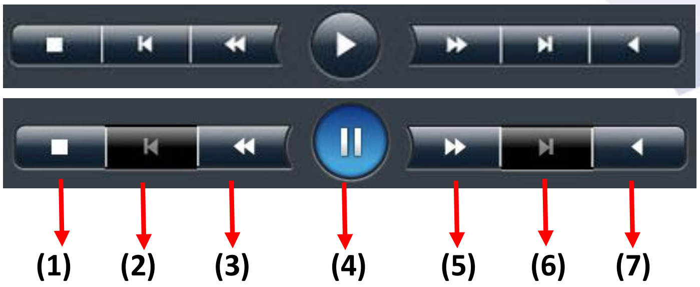

Scale bar
Time table
Digital zoom in/out
Video playback speed control
Display mode
Audio control

1. Display mode

NVR supports multi-display modes for playback. When you click a display mode, the mode icons will turn into blue.

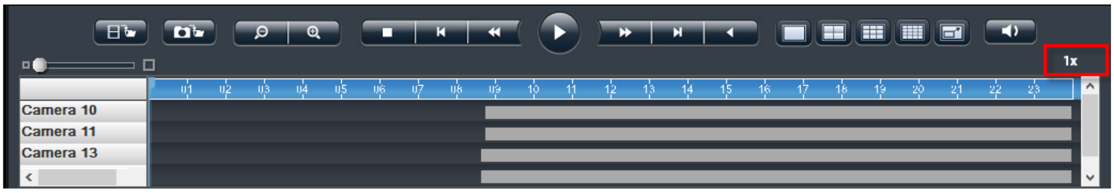
Icon	Description
⧉	Full Screen
▭	1 screen
⊞	4 screen
▦	9 screen
▦	1.6.1.1.1.1 screen

2. Video playback speed control



(1) **Stop**: to clear playback videos
(2) **Previous frame:** to show the earlier frame
(3) **Slow motion**: to play in slower speed
(4) **Play/ Pause**: to play video file or to temporarily stop the playback
(5) **Fast forward**: to play in faster speed
(6) **Next frame**: to show the next frame
(7) **Rewind:** to let video automatically wind backward

The play speed status is beside display mode.



3. Mute control

Users can choose whether to play audio when playback videos. The button will change icon appearance while clicking:

🔇 : Mute 🔊 : Sound

4. Digital zoom out and digital zoom in

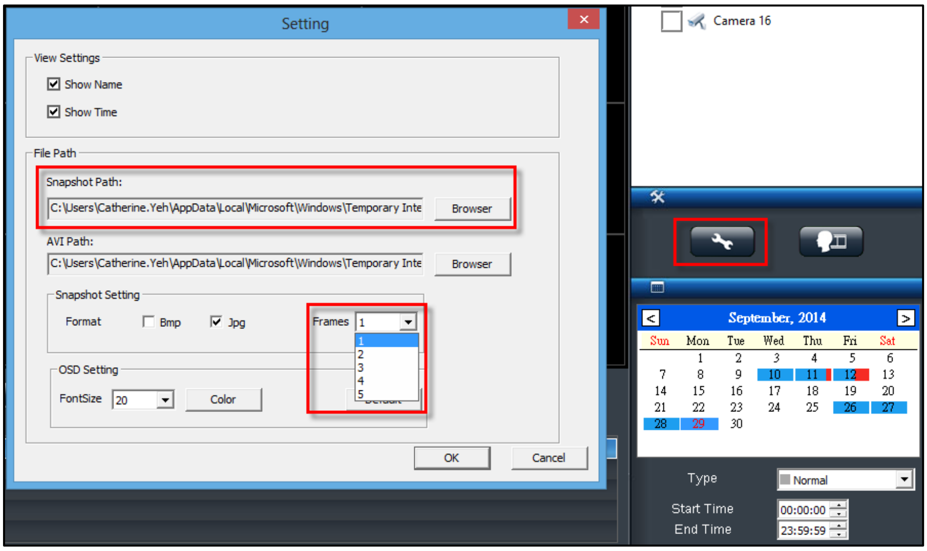
The image can also return to previous sizes by clicking the digital zoom out button. The image can be enlarged by clicking digital zoom-in button.

5. Snapshot

Users can save the image of playback by clicking “**Snapshot**”.
Before taking snapshot from NVR, users are recommended to set snapshot path from “**Setting.**”
”

- **Sequential snapshot on remote playback**

Users can have the sequent images from recording video while in playback, which helps users to catch the key frame in the recording files. It can be setup up to 5 frames for sequential snapshots.


Setting

View Settings

☑ Show Name

☑ Show Time

File Path

Snapshot Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

AVI Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

Snapshot Setting

Format ☐ Bmp ☑ Jpg

Frames 1

OSD Setting

FontSize 20

Type: Normal

Start Time: 00:00:00

End Time: 23:59:59

Browser
Browser
1
2
3
4
5
Color
OK
Cancel
Camera 16
September, 2014
Sun Mon Tue Wed Thu Fri Sat

6. Dewarp for fisheye cameras

By right click on the video, users can choose the proper dewarp engine for fisheye camera.

a. Choose the dewarp engine:

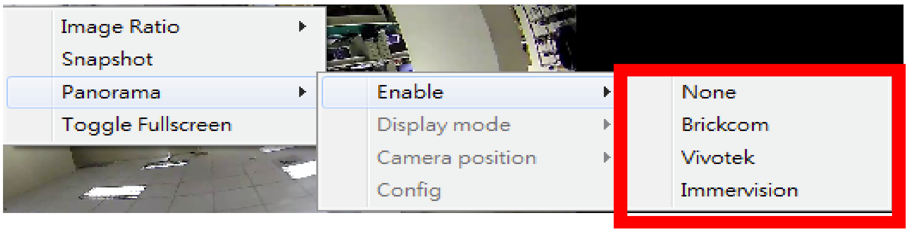


Image Ratio
Snapshot
Panorama
Toggle Fullscreen
Enable
Display mode
Camera position
Config
None
Brickcom
Vivotek
Immervision

b. Choose the mounting type

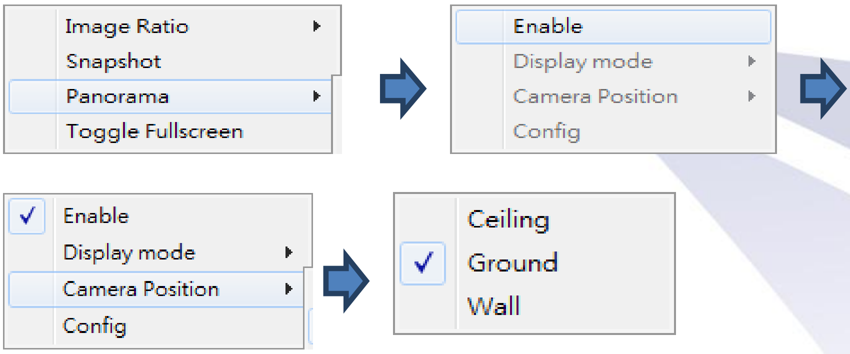
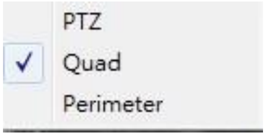


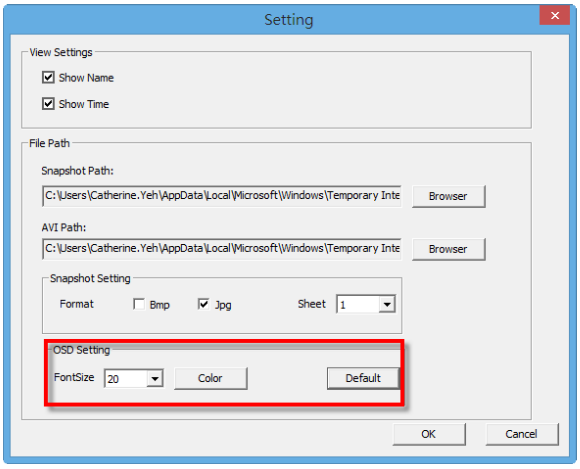
Image Ratio
Snapshot
Panorama
Toggle Fullscreen
Enable
Display mode
Camera Position
Config
Enable
Display mode
Camera Position
Config
Ceiling
Ground
Wall

c. Choose the display mode


PTZ
Quad
Perimeter

7. Change OSD color and font size

Users can select different OSD color while having the playback of recording files.


Setting
View Settings
File Path
Browser
Browser
Snapshot Setting
OSD Setting
Color
Default
OK
Cancel

☑ Show Name

☑ Show Time

Snapshot Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

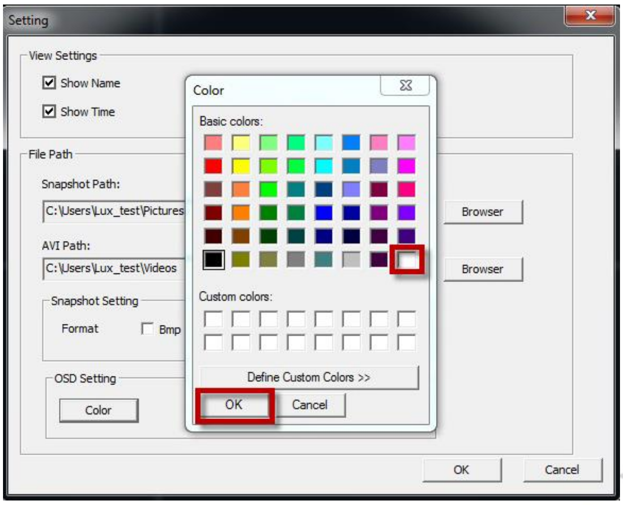
AVI Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

Format ☐ Bmp ☑ Jpg Sheet 1

FontSize 20

1) Click "Setting"

2) Click OSD "color" setting button the select the OSD color and click "OK"


Setting
View Settings
File Path
Browser
Browser
Snapshot Setting
OSD Setting
Color
OK
Cancel
Color
Basic colors:
Custom colors:
Define Custom Colors >>
OK
Cancel

☑ Show Name

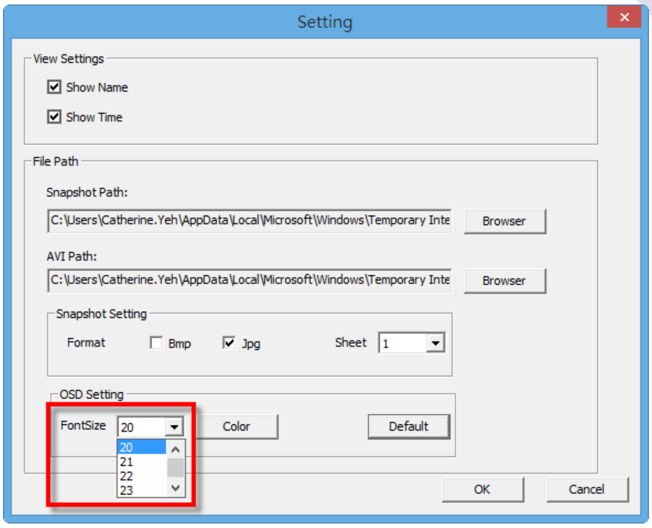
☑ Show Time

Snapshot Path: C:\Users\Lux_test\Pictures

AVI Path: C:\Users\Lux_test\Videos

Format ☐ Bmp

3) Select font size and click "OK"


Setting
View Settings
File Path
Browser
Browser
Snapshot Setting
OSD Setting
Color
Default
OK
Cancel
20
21
22
23

☑ Show Name

☑ Show Time

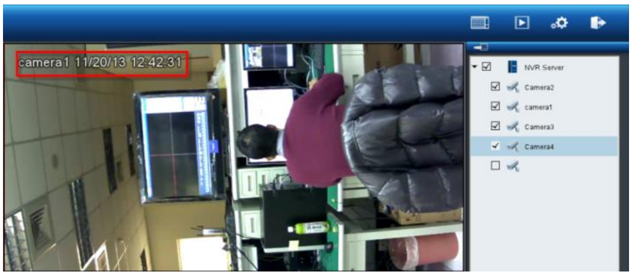
Snapshot Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

AVI Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

Format ☐ Bmp ☑ Jpg Sheet 1

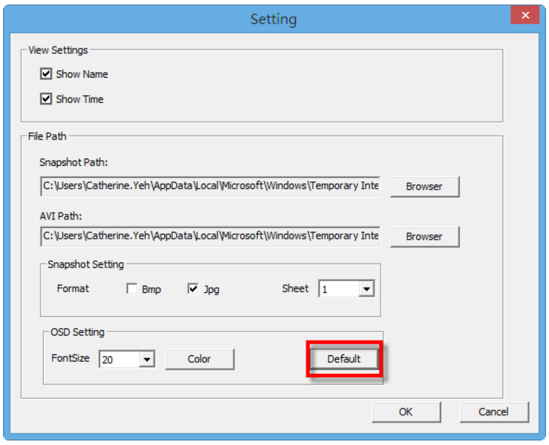
FontSize 20

4) OSD color and font size will be changed as below.


camera1 11/20/13 12:42:31
☑ NVR Server
☑ Camera2
☑ camera1
☑ Camera3
✓ Camera4
☐

- **Default button**

  By clicking “**Default**” button, users can default OSD setting. Default font size is 20 in orange color.



Setting

View Settings

☑ Show Name

☑ Show Time

File Path

Snapshot Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

AVI Path: C:\Users\Catherine.Yeh\AppData\Local\Microsoft\Windows\Temporary Inte

Snapshot Setting

Format ☐ Bmp ☑ Jpg Sheet 1

OSD Setting

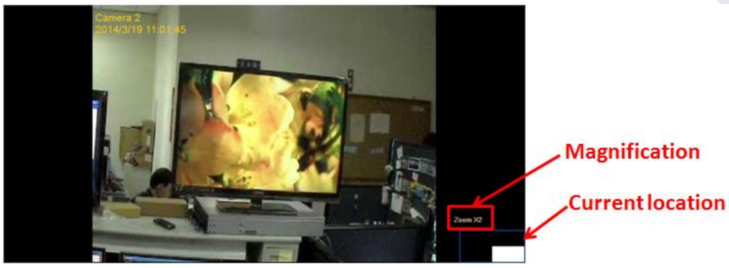
FontSize 20

Browser
Browser
Color
Default
OK
Cancel

4.3.6 Zooming with Mouse scroll

In addition to digital zoom in/out button, users can use mouse scroll to find out crucial proof in incident site in playback.

Zoom in/out: To click on the video window and use mouse scroll to enlarge the image.


Camera 2
2014/3/19 11:01:45
Zoom X2
Magnification
Current location

View enlarged images:

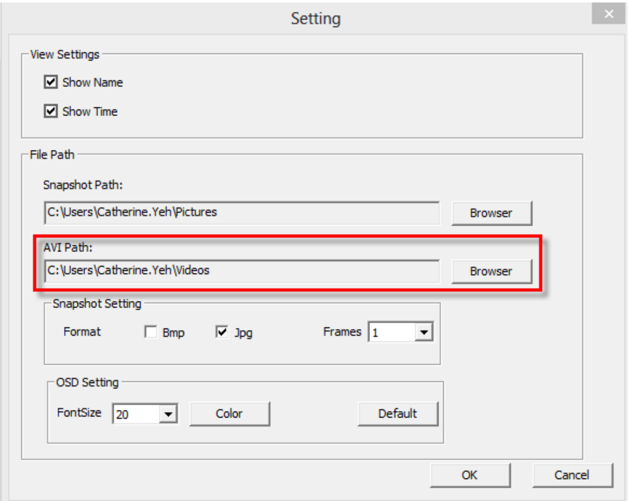
To press and hold left mouse button, drag the image to the place that you would like to monitor.

4.3.7 Export

Export function allows users to retrieve recorded files from NVR.
NVR offers two methods to export recorded videos for different export requirements:
Method1. Export video by specifying export start time and end time
Method2. Instant export (export videos while playing recoded videos)

⚠ **Note:** NVR offers 3 formats to export recorded videos depending on different security level. More information, please refer to 5.6.4 USB Backup -> 3.**Advance Settings**

- **Check Video AVI Path**
  Before exporting videos, users are recommended to set AVI path via "**Setting**" button. **Exported videos**, **NVRPlayer** and **NVRCheck** to be saved in this path.



Setting

View Settings
☑ Show Name
☑ Show Time

File Path
Snapshot Path: C:\Users\Catherine.Yeh\Pictures
AVI Path: C:\Users\Catherine.Yeh\Videos

Snapshot Setting
Format ☐ Bmp ☑ Jpg
Frames 1

OSD Setting
FontSize 20

⚠ **Note:** It is necessary to run IE browser as administrator to change playback setting.

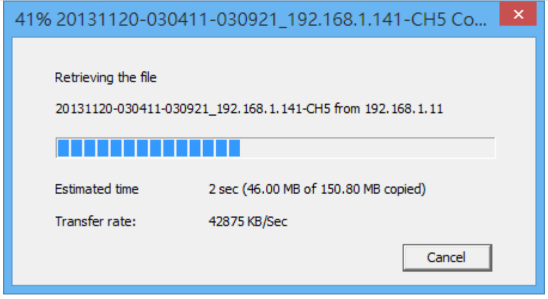
Method1. Export video by specifying export start time and end time

1) Select cameras, date, recording type and time period
Users can select which cameras and what time range is to export the recording file.

2) Start to export files from the NVR
By pressing the Export button, the process of export will start.
NVRPlayer and NVRCheck will also be downloaded with video files.

⚠ NVRPlayer is a portable player to play videos exported from NVR.
⚠ NVRCheck is the verification tool to verify if the recorded files are originated from NVR.

(1) To cancel the transfer.



41% 20131120-030411-030921_192.168.1.141-CH5 Co...

Retrieving the file

20131120-030411-030921_192.168.1.141-CH5 from 192.168.1.11

Estimated time 2 sec (46.00 MB of 150.80 MB copied)

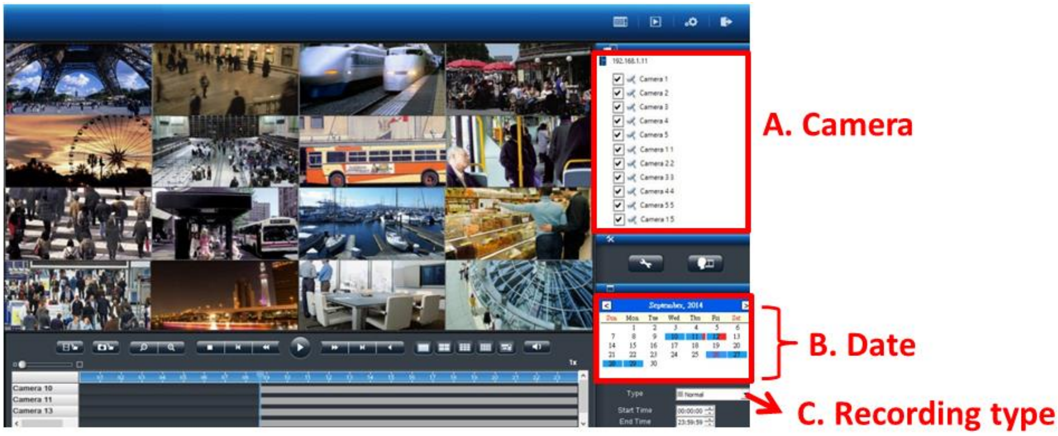
Transfer rate: 42875 KB/Sec

Users can cancel the files transferred while downloading files from NVR.

Method2. Instant Export

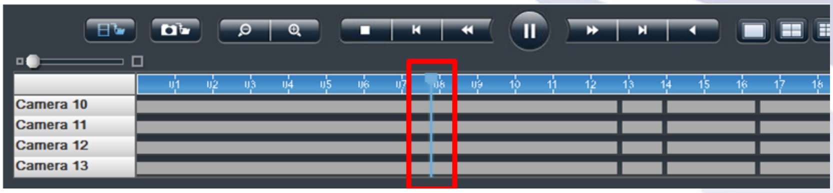
Instant export allows users to export maximum 16-channel videos while playing recoded videos on playback interface. **A playlist** will also be exported to PC in order to precisely record export start time and end time. Collocating with **NVRPlayer**, users can simultaneously play 1/4/16-channel exported videos via import playlist.

1) Select camera, date and recording type

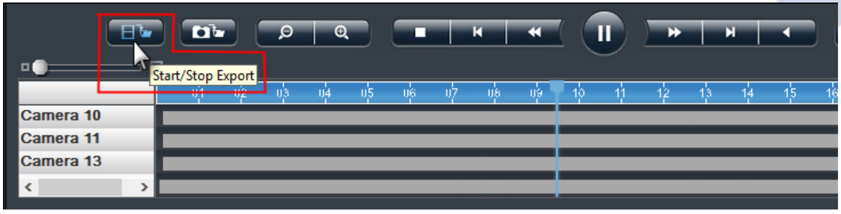

A. Camera
B. Date
C. Recording type

2) Click **“Play”** button ▶

3) Move seek bar to desire export time

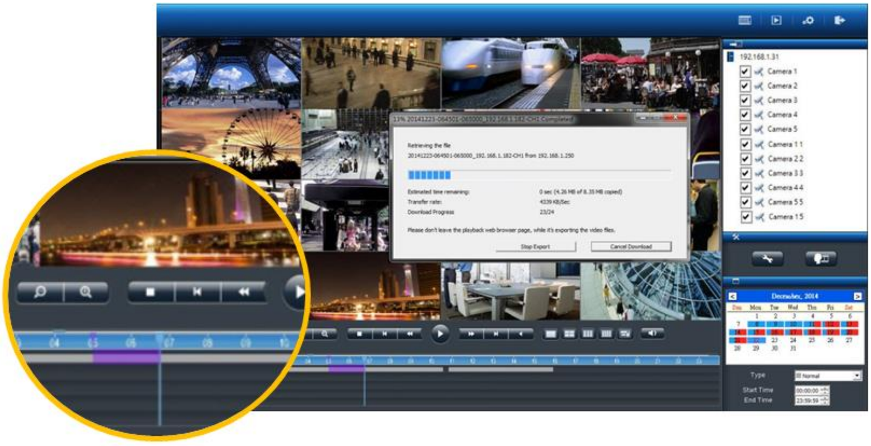

Camera 10
Camera 11
Camera 12
Camera 13

4) Click **“Start/Stop Export”** button to start export video


Start/Stop Export
Camera 10
Camera 11
Camera 13

5) A window will pop out to display export status. On time table, exporting time

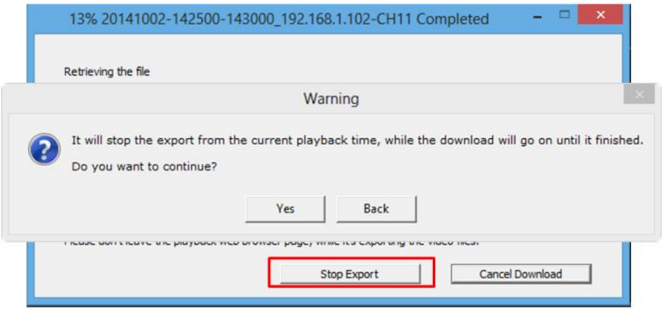
period will be highlight in **purple** color.



⚠ **Note:** Please don't close the playback browser page, while it's exporting the video files. Otherwise, the exporting video will not be saved on your PC.

⚠ **Note:** NVR will also download **NVRCheck** and **NVRPlayer** to your PC.

6) Click **"Stop Export"** button to stop instant export
Once users click "**Stop Export**", it will stop export from the **current playback time**, while the download will go on until it finish.



13% 20141002-142500-143000_192.168.1.102-CH11 Completed

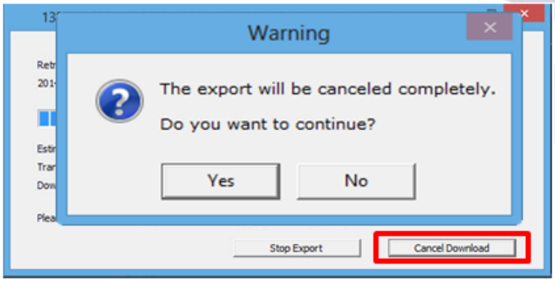
Retrieving the file

Warning

It will stop the export from the current playback time, while the download will go on until it finished.

Do you want to continue?

⚠ **Note:** If user clicks "**Cancel Download**", the export will be canceled completely without any exported video files.

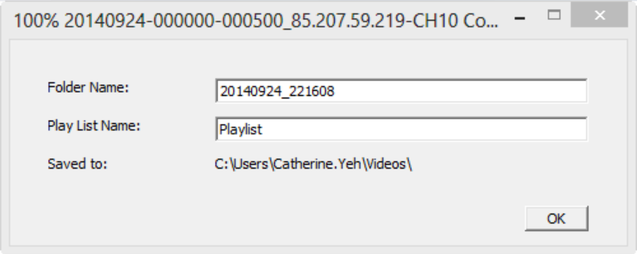


Warning

The export will be canceled completely.

Do you want to continue?

7) Once the export is finished, a playlist window will pop out to let user modify folder Name and Playlist Name.



100% 20140924-000000-000500_85.207.59.219-CH10 Co...

Folder Name: 20140924_221608

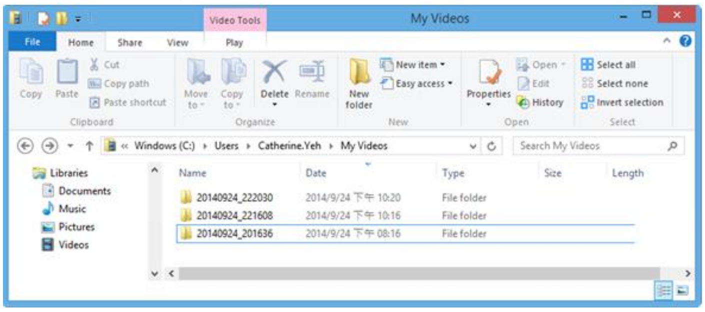
Play List Name: Playlist

Saved to: C:\Users\Catherine.Yeh\Videos\

⚠ **Note.** The default folder is named by the time when users click the "Start Export" button. (yyyymmdd_hhmmss)

2. Play exported video by instant export

1) Access the exported file

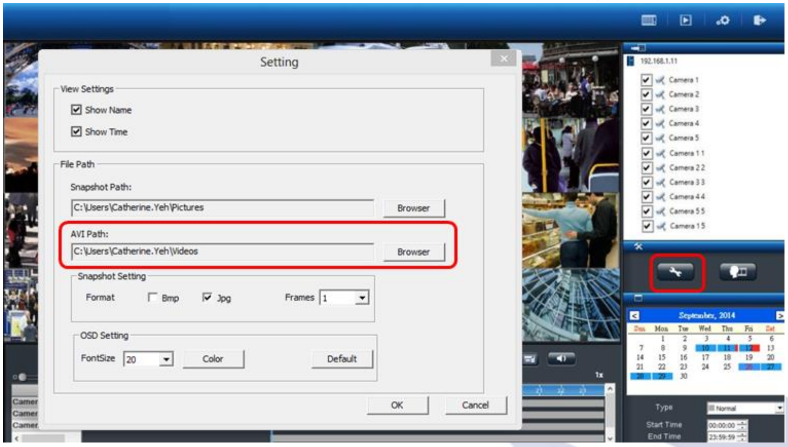


Video Tools
My Videos
File
Home
Share
View
Play
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New folder
New item
Easy access
New
Properties
Open
Edit
History
Open
Select all
Select none
Invert selection
Select
Search My Videos
Libraries
Documents
Music
Pictures
Videos

« Windows (C:) › Users › Catherine.Yeh › My Videos

Name	Date	Type	Size	Length
20140924_222030	2014/9/24 下午 10:20	File folder		
20140924_221608	2014/9/24 下午 10:16	File folder		
20140924_201636	2014/9/24 下午 08:16	File folder		

⚠ **Note.** Exported file can be found in "**Setting**" button on playback



Setting

View Settings

☑ Show Name

☑ Show Time

File Path

Snapshot Path: C:\Users\Catherine.Yeh\Pictures

AVI Path: C:\Users\Catherine.Yeh\Videos

Snapshot Setting

Format ☐ Bmp ☑ Jpg Frames 1

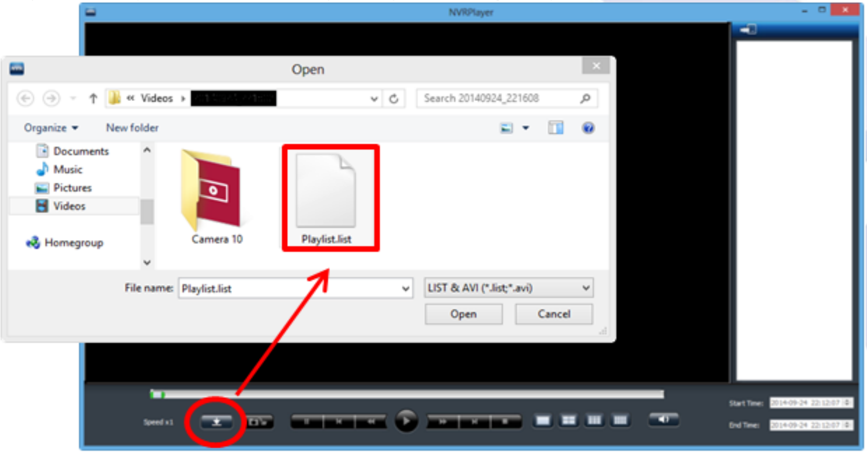
OSD Setting

FontSize 20

Browser
Browser
Color
Default
OK
Cancel
192.168.1.11
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5
Camera 11
Camera 22
Camera 33
Camera 44
Camera 55
Camera 15
September, 2014
Type
Normal
Start Time
00:00:00
End Time
23:59:59

2) Unzip and run NVRPlayer

3) Import **Playlist** to NVRPlayer by clicking "**Open File**" button



NVRPlayer

Open

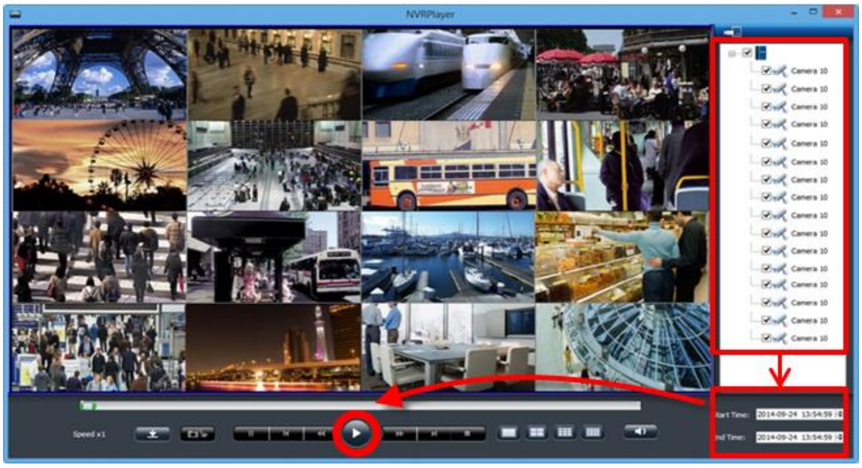
« Videos › [redacted]

File name: Playlist.list

LIST & AVI (*.list;*.avi)

Search 20140924_221608
Organize
New folder
Documents
Music
Pictures
Videos
Homegroup
Camera 10
Playlist.list
Open
Cancel
Start Time
End Time

4) Select cameras, start time and end time. Then, click “**Play**” button to play videos



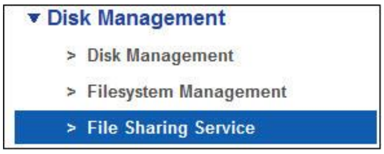
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10
☑ Camera 10

tart Time: 2014-09-24 13:54:59
nd Time: 2014-09-24 13:54:59

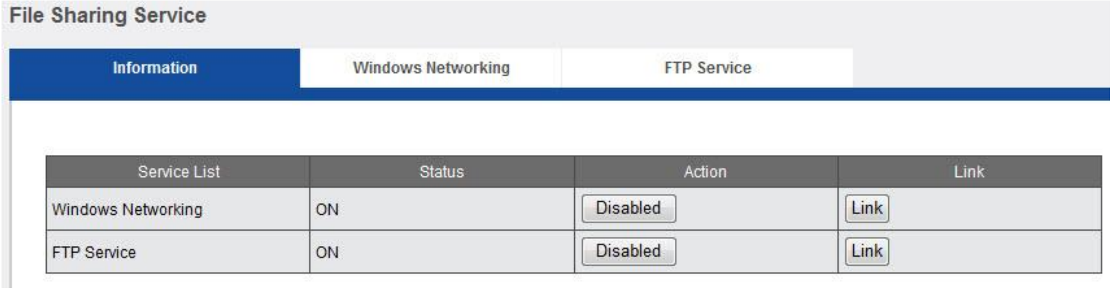
4.4 Play Video Files

Users can access the video files by Windows Networking and FTP Service.

⚠ **Note**: To use Windows Networking and FTP Service, please enable both in“**File Sharing Service**” in configuration page.


▼ Disk Management
> Disk Management
> Filesystem Management
> File Sharing Service

By using the link button on file sharing service page, users can open the dialog directly after the service is enable.


File Sharing Service
Information
Windows Networking
FTP Service

Service List	Status	Action	Link
Windows Networking	ON	Disabled	Link
FTP Service	ON	Disabled	Link

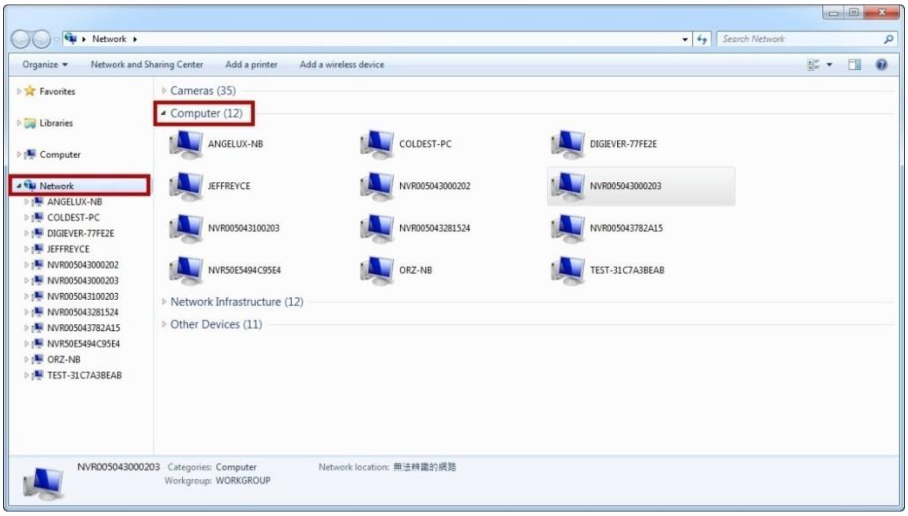
4.4.1 Windows Networking

Through Windows Networking, users can search video files in LAN via **choosing a computer of NVR** or **entering IP address from Windows Start menu**.

- **Choose a Computer of NVR**

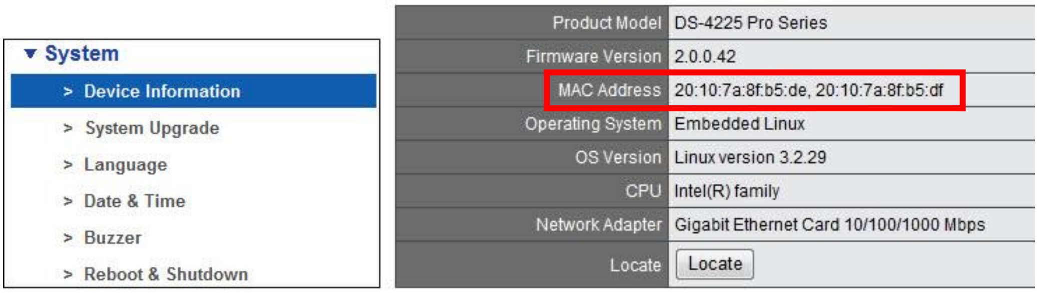
  Please go to “**Network**” folder and choose NVR. If more than one server exists in the same network, “**Network**” folder will display all servers.

⚠ **Note**: The default **computer name** of each connected NVR is from “**Mac Address**” of each NVR, which can be found in configuration page.


Network
Search Network
Organize
Network and Sharing Center
Add a printer
Add a wireless device
Favorites
Libraries
Computer
Network
ANGELUX-NB
COLDEST-PC
DIGIEVER-77FE2E
JEFFREYCE
NVR005043000202
NVR005043000203
NVR005043100203
NVR005043281524
NVR005043782A15
NVR50E5494C95E4
ORZ-NB
TEST-31C7A3BEAB
Cameras (35)
Computer (12)
ANGELUX-NB
COLDEST-PC
DIGIEVER-77FE2E
JEFFREYCE
NVR005043000202
NVR005043000203
NVR005043100203
NVR005043281524
NVR005043782A15
NVR50E5494C95E4
ORZ-NB
TEST-31C7A3BEAB
Network Infrastructure (12)
Other Devices (11)
NVR005043000203

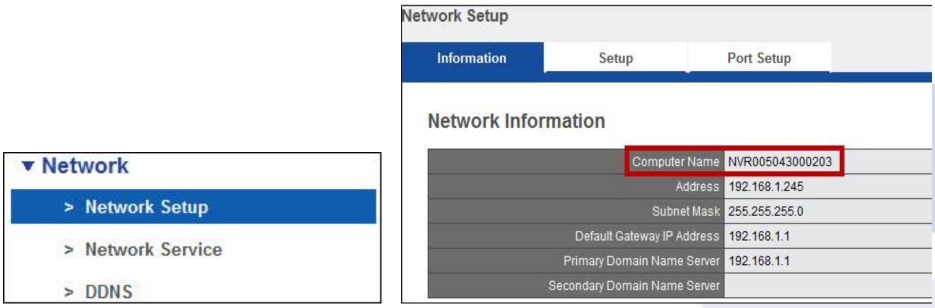
Categories: Computer
Workgroup: WORKGROUP
Network location: 無法辨識的網路

To acquire Mac address, users can refer to “**System**” > “**Device Information**” >“**System Information**” in configuration page.


System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown
Locate

Product Model	DS-4225 Pro Series
Firmware Version	2.0.0.42
MAC Address	20:10:7a:8f:b5:de, 20:10:7a:8f:b5:df
Operating System	Embedded Linux
OS Version	Linux version 3.2.29
CPU	Intel(R) family
Network Adapter	Gigabit Ethernet Card 10/100/1000 Mbps
Locate	Locate

“**Computer Name**” is shown in “**Network**” > “**Network Setup**” > “**Information**” in configuration page.

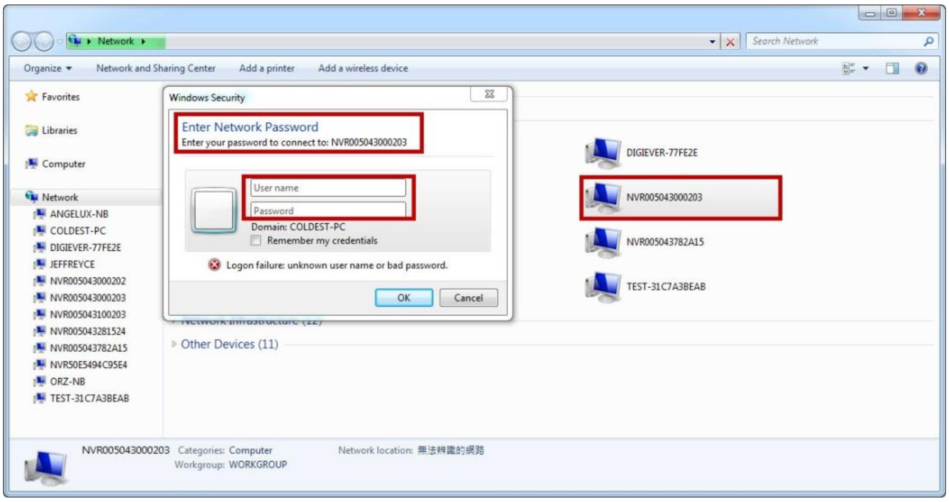

Network
> Network Setup
> Network Service
> DDNS
Network Setup
Information
Setup
Port Setup

Network Information

Computer Name	NVR005043000203
Address	192.168.1.245
Subnet Mask	255.255.255.0
Default Gateway IP Address	192.168.1.1
Primary Domain Name Server	192.168.1.1
Secondary Domain Name Server	

For example, the computer name is **NVR005043000203**.
Thus, users can select a NVR in Network folder by this computer name.

As you select the NVR, a window will pop up and ask to enter network password.


Network
Search Network
Organize
Network and Sharing Center
Add a printer
Add a wireless device
Favorites
Libraries
Computer
Network
ANGELUX-NB
COLDEST-PC
DIGIEVER-77FE2E
JEFFREYCE
NVR005043000202
NVR005043000203
NVR005043100203
NVR005043281524
NVR005043782A15
NVR50E5494C95E4
ORZ-NB
TEST-31C7A3BEAB
Windows Security
User name
Password
OK
Cancel
Network Infrastructure (12)
Other Devices (11)
DIGIEVER-77FE2E
NVR005043000203
NVR005043782A15
TEST-31C7A3BEAB

Enter Network Password

Enter your password to connect to: NVR005043000203

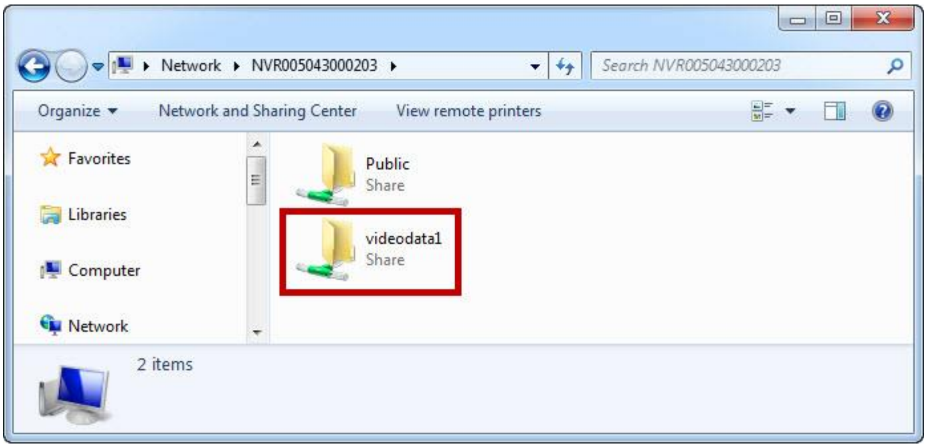
Domain: COLDEST-PC

☐ Remember my credentials

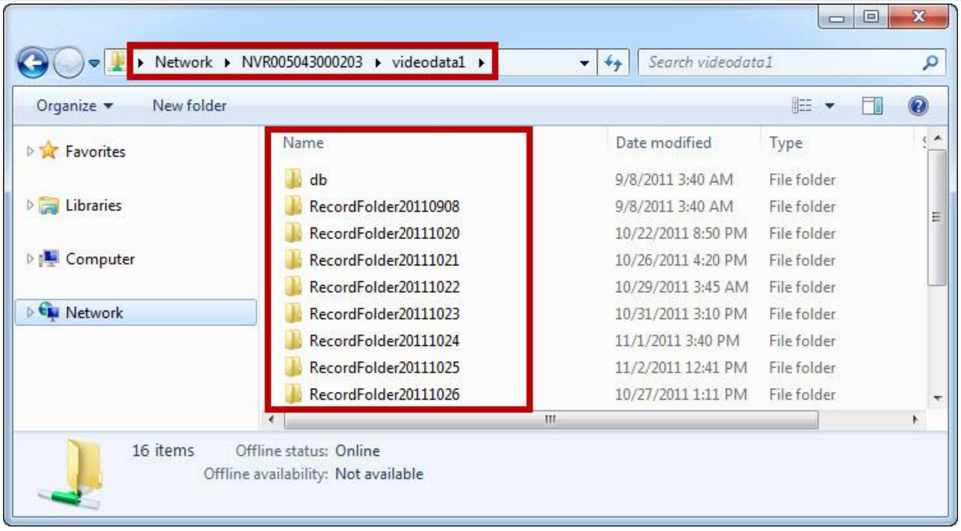
Logon failure: unknown user name or bad password.

NVR005043000203 Categories: Computer Workgroup: WORKGROUP Network location: 無法辨識的網路

If users don’t amend the user name and password, please enter the default ones:“**admin/admin**.”


Network
NVR005043000203
Search NVR005043000203
Organize
Network and Sharing Center
View remote printers
Favorites
Libraries
Computer
Network
Public
Share
videodata1
Share
2 items

After users enter accurate user name and password, the NVR will display the folder “**Public**” and “**videodata1**.” Please select “**videodata1**” to check video files.


Organize
New folder
Favorites
Libraries
Computer
Network
Search videodata1

Network ▸ NVR005043000203 ▸ videodata1 ▸

Name	Date modified	Type
db	9/8/2011 3:40 AM	File folder
RecordFolder20110908	9/8/2011 3:40 AM	File folder
RecordFolder20111020	10/22/2011 8:50 PM	File folder
RecordFolder20111021	10/26/2011 4:20 PM	File folder
RecordFolder20111022	10/29/2011 3:45 AM	File folder
RecordFolder20111023	10/31/2011 3:10 PM	File folder
RecordFolder20111024	11/1/2011 3:40 PM	File folder
RecordFolder20111025	11/2/2011 12:41 PM	File folder
RecordFolder20111026	10/27/2011 1:11 PM	File folder

16 items Offline status: Online
Offline availability: Not available

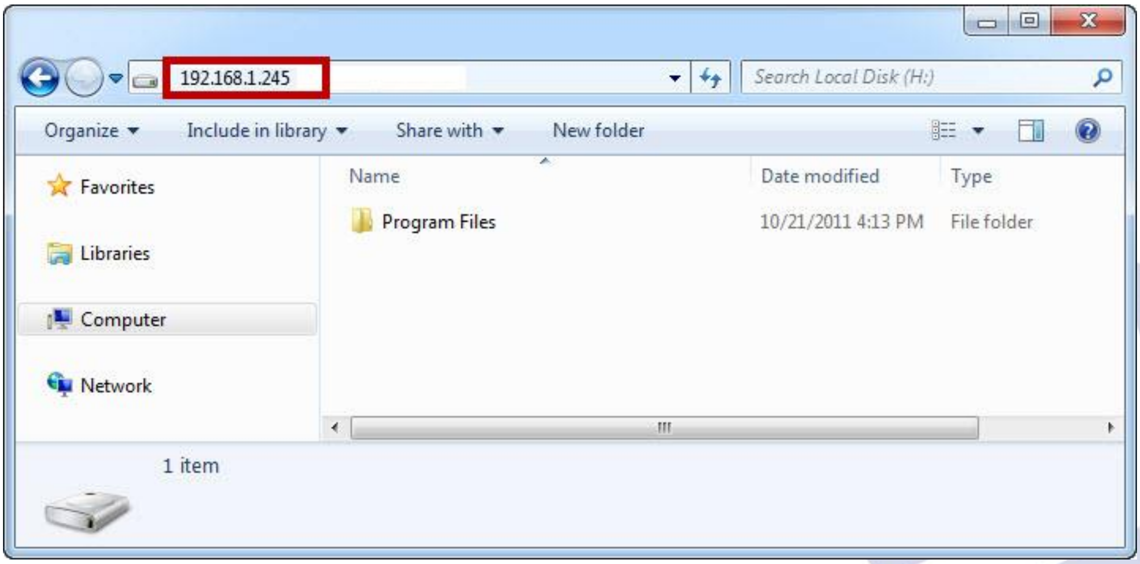
After entering “**videodata1**,” the folder displays RecordFolderchronologicallyby recording dates. Please select a folder to enter.

All video files lists chronologically by recorded time and video length of each chunk is five minutes.

Select a video file to play.

- **Enter IP Address to Search**

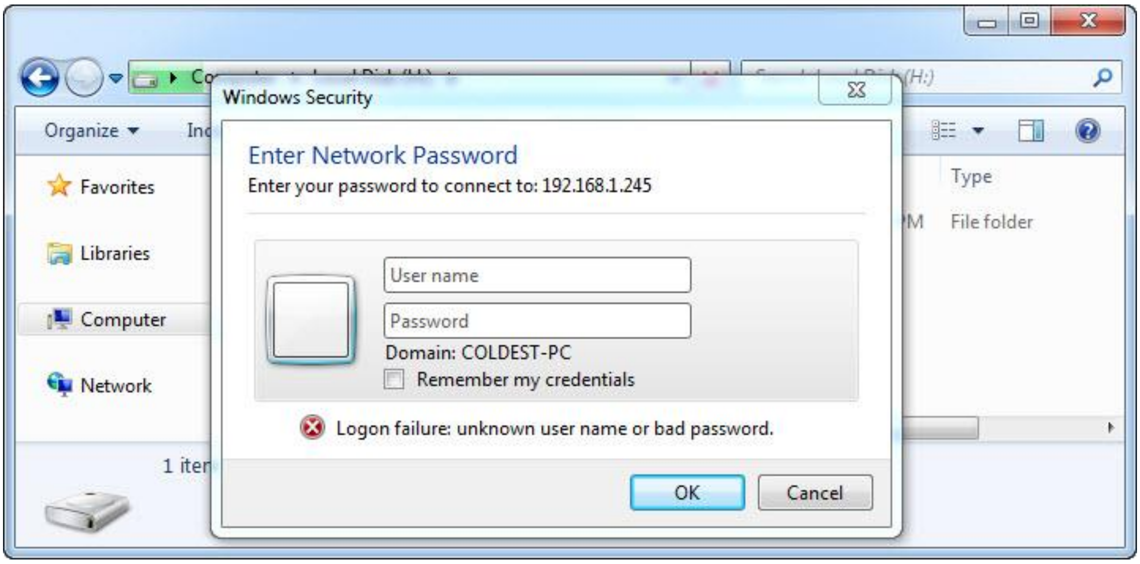
Please enter NVR IP address from the Windows Start menu.


Organize
Include in library
Share with
New folder
Favorites
Libraries
Computer
Network
Search Local Disk (H:)

192.168.1.245

Name	Date modified	Type
Program Files	10/21/2011 4:13 PM	File folder

1 item


Windows Security

Enter Network Password

Enter your password to connect to: 192.168.1.245

User name

Password

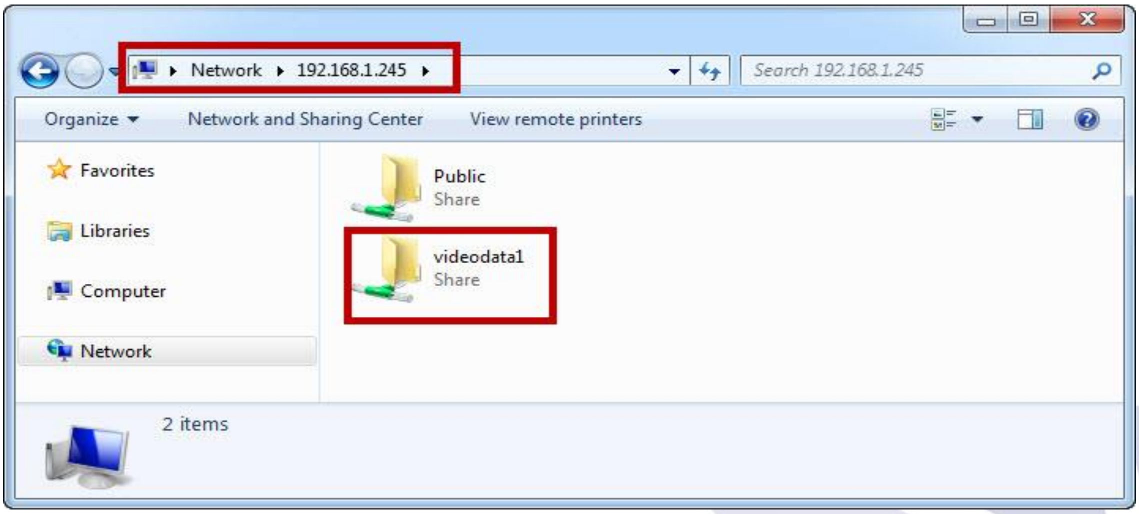
Domain: COLDEST-PC

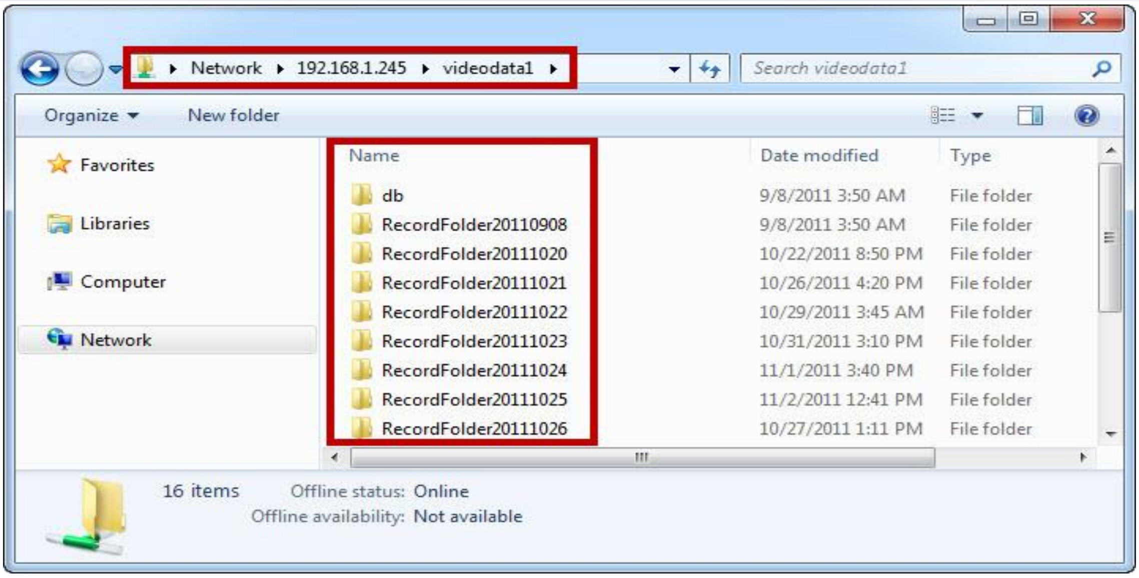
☐ Remember my credentials

Logon failure: unknown user name or bad password.
Organize
Favorites
Libraries
Computer
Network
1 item
Type
File folder
OK
Cancel

As you enter the IP address, a window will pop up and ask for network password. If you don’t amend the user name and password, please enter the default ones:“**admin/admin**.”

After users enter accurate user name and password, the folder of NVR displays the folder “**videodata1**.” Continuously, select a RecordFolder and a video file to play.


Network ▸ 192.168.1.245 ▸
Search 192.168.1.245
Organize
Network and Sharing Center
View remote printers
Favorites
Libraries
Computer
Network
Public
Share
videodata1
Share
2 items



Network ▸ 192.168.1.245 ▸ videodata1 ▸
Search videodata1
Organize
New folder
Favorites
Libraries
Computer
Network

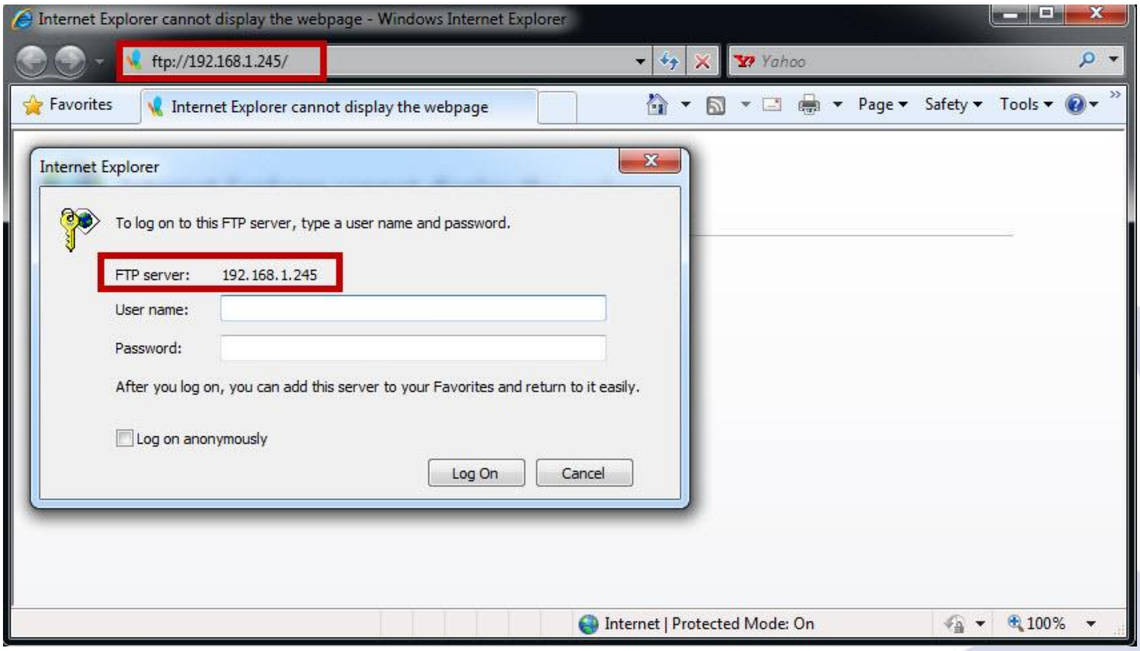
Name	Date modified	Type
db	9/8/2011 3:50 AM	File folder
RecordFolder20110908	9/8/2011 3:50 AM	File folder
RecordFolder20111020	10/22/2011 8:50 PM	File folder
RecordFolder20111021	10/26/2011 4:20 PM	File folder
RecordFolder20111022	10/29/2011 3:45 AM	File folder
RecordFolder20111023	10/31/2011 3:10 PM	File folder
RecordFolder20111024	11/1/2011 3:40 PM	File folder
RecordFolder20111025	11/2/2011 12:41 PM	File folder
RecordFolder20111026	10/27/2011 1:11 PM	File folder

16 items Offline status: Online
Offline availability: Not available

4.4.2 FTP Service

To access FTP service in a web-based interface, please open Windows Internet Explorer and enter NVR IP address which users configure.

⚠ **Note**: To access FTP service in WAN, please enable router's Internet access and specify the same port as NVR. (The default is 21)



Internet Explorer cannot display the webpage - Windows Internet Explorer
ftp://192.168.1.245/
Yahoo
Favorites
Internet Explorer cannot display the webpage
Page
Safety
Tools
Internet Explorer
Log On
Cancel
Internet | Protected Mode: On
100%

To log on to this FTP server, type a user name and password.

FTP server: 192.168.1.245

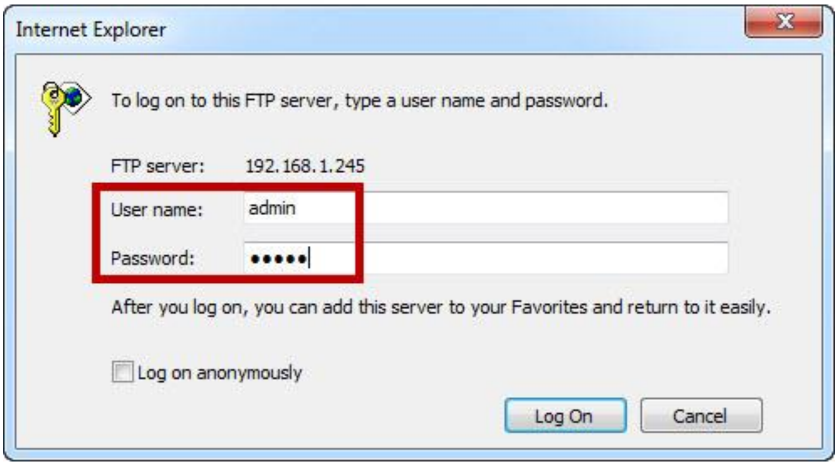
User name:

Password:

After you log on, you can add this server to your Favorites and return to it easily.

☐ Log on anonymously

As you enter the IP address, a window will pop up and ask to type a user name and password to log in FTP server. If you don't amend the user name and password, please enter the default ones:"**admin/admin**."



Internet Explorer

To log on to this FTP server, type a user name and password.

FTP server: 192.168.1.245

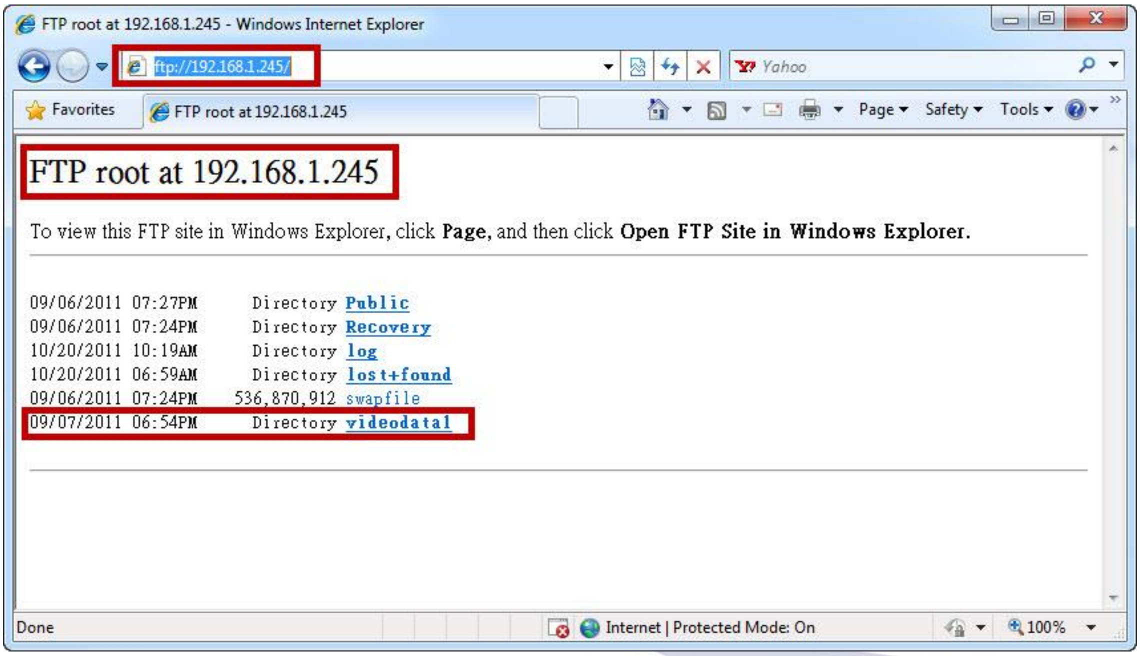
User name: admin

Password: •••••

After you log on, you can add this server to your Favorites and return to it easily.

☐ Log on anonymously

Please click “**Log On**” to proceed.



FTP root at 192.168.1.245 - Windows Internet Explorer

ftp://192.168.1.245/

FTP root at 192.168.1.245

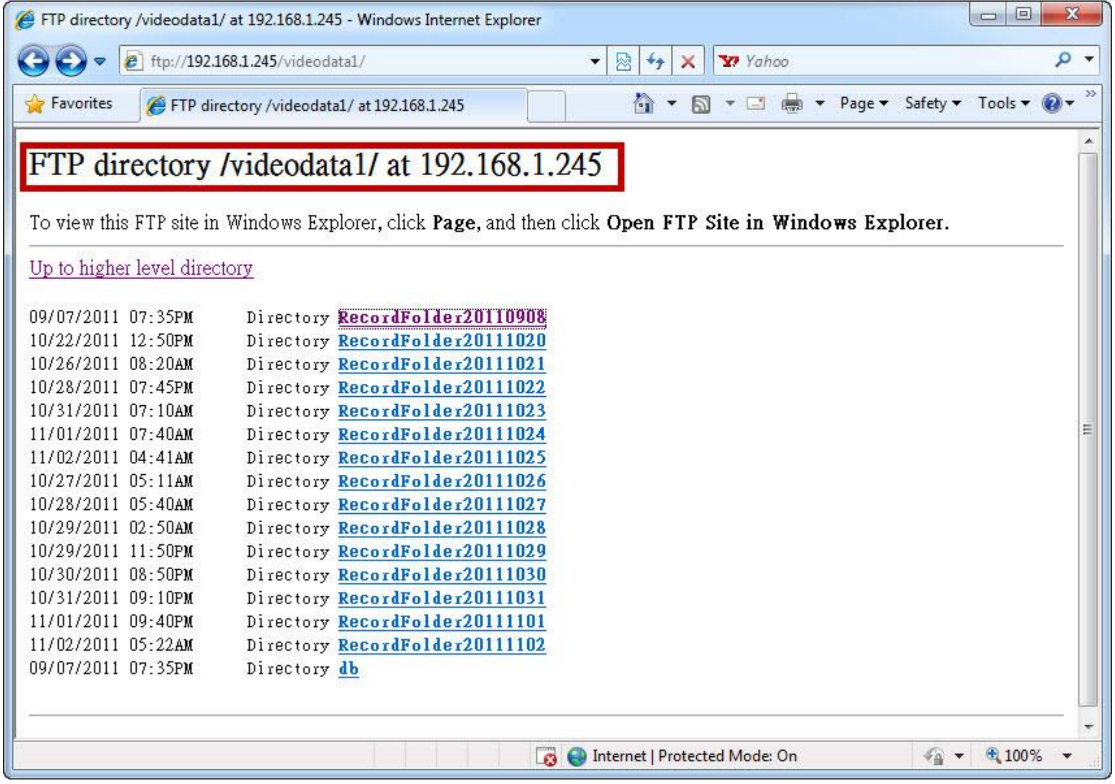
To view this FTP site in Windows Explorer, click **Page**, and then click **Open FTP Site in Windows Explorer**.

```
09/06/2011 07:27PM      Directory Public
09/06/2011 07:24PM      Directory Recovery
10/20/2011 10:19AM      Directory log
10/20/2011 06:59AM      Directory lost+found
09/06/2011 07:24PM    536,870,912 swapfile
09/07/2011 06:54PM      Directory videodata1
```

Done

Internet | Protected Mode: On

IE browser shows the folders on FTP server. Please select folder “**videodata1**”.


FTP directory /videodata1/ at 192.168.1.245 - Windows Internet Explorer
ftp://192.168.1.245/videodata1/
Yahoo
Favorites
FTP directory /videodata1/ at 192.168.1.245
Page
Safety
Tools
Internet | Protected Mode: On
100%

FTP directory /videodata1/ at 192.168.1.245

To view this FTP site in Windows Explorer, click **Page**, and then click **Open FTP Site in Windows Explorer.**

Up to higher level directory

```
09/07/2011 07:35PM      Directory RecordFolder20110908
10/22/2011 12:50PM      Directory RecordFolder20111020
10/26/2011 08:20AM      Directory RecordFolder20111021
10/28/2011 07:45PM      Directory RecordFolder20111022
10/31/2011 07:10AM      Directory RecordFolder20111023
11/01/2011 07:40AM      Directory RecordFolder20111024
11/02/2011 04:41AM      Directory RecordFolder20111025
10/27/2011 05:11AM      Directory RecordFolder20111026
10/28/2011 05:40AM      Directory RecordFolder20111027
10/29/2011 02:50AM      Directory RecordFolder20111028
10/29/2011 11:50PM      Directory RecordFolder20111029
10/30/2011 08:50PM      Directory RecordFolder20111030
10/31/2011 09:10PM      Directory RecordFolder20111031
11/01/2011 09:40PM      Directory RecordFolder20111101
11/02/2011 05:22AM      Directory RecordFolder20111102
09/07/2011 07:35PM      Directory db
```

The folder displays RecordFolder chronologically by recording dates. Please select a folder to enter.

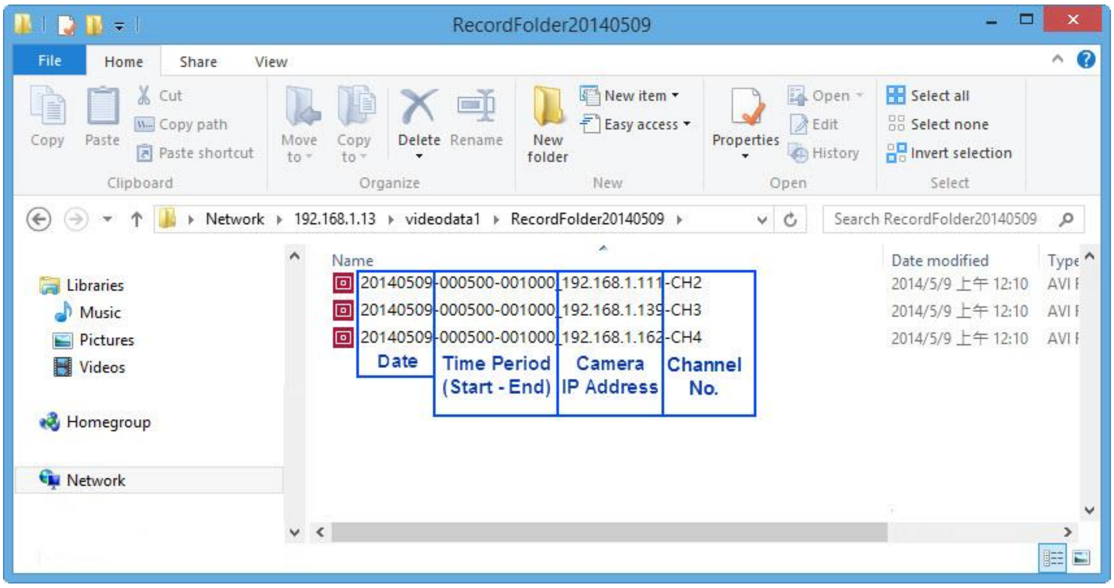
All video files lists chronologically by recorded time and video length of each chunk is five minutes.

Select a video file to play.

4.4.3 Naming Rule of Video files

NVR writes and memorizes videos to HDD in every 5 minutes. This way can ensure all videos are well saved when encountering power outage or other accidents. Besides, when exporting videos, each videos file is in around 5 minutes as well. In this way, it is clear for users to search for the videos they are aiming for.

The naming rule of video files is “(year)(month)(day)-(hour)(minute)(second)-(hour)(minute)(second)_(Camera IP Address)-(Channel No).”



Name	Date modified	Type
20140509-000500-001000_192.168.1.111-CH2	2014/5/9 上午 12:10	AVI F
20140509-000500-001000_192.168.1.139-CH3	2014/5/9 上午 12:10	AVI F
20140509-000500-001000_192.168.1.162-CH4	2014/5/9 上午 12:10	AVI F

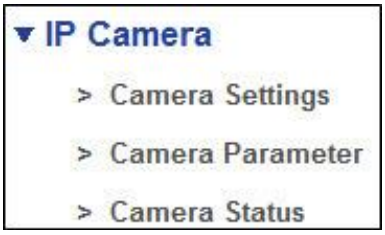
RecordFolder20140509
File
Home
Share
View
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New folder
New item
Easy access
New
Properties
Open
Edit
History
Open
Select all
Select none
Invert selection
Select
Network
192.168.1.13
videodata1
RecordFolder20140509
Search RecordFolder20140509
Libraries
Music
Pictures
Videos
Homegroup
Network
Date
Time Period (Start - End)
Camera IP Address
Channel No.

Chapter 5. Configuration

In configuration page, users can configure **Quick Configuration**, **IP Camera**, **Recording & Event**, **Disk Management**, **NetworkManagement** and **System** from each drop-down menu.

⚠ **Note**: NVR will automatically log out from configuration page after idle for 10 minutes.

5.1 IP Camera



▼ IP Camera
> Camera Settings
> Camera Parameter
> Camera Status

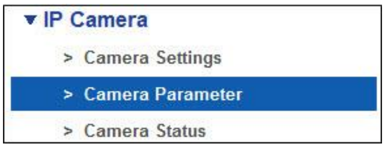
5.1.1 Camera Settings

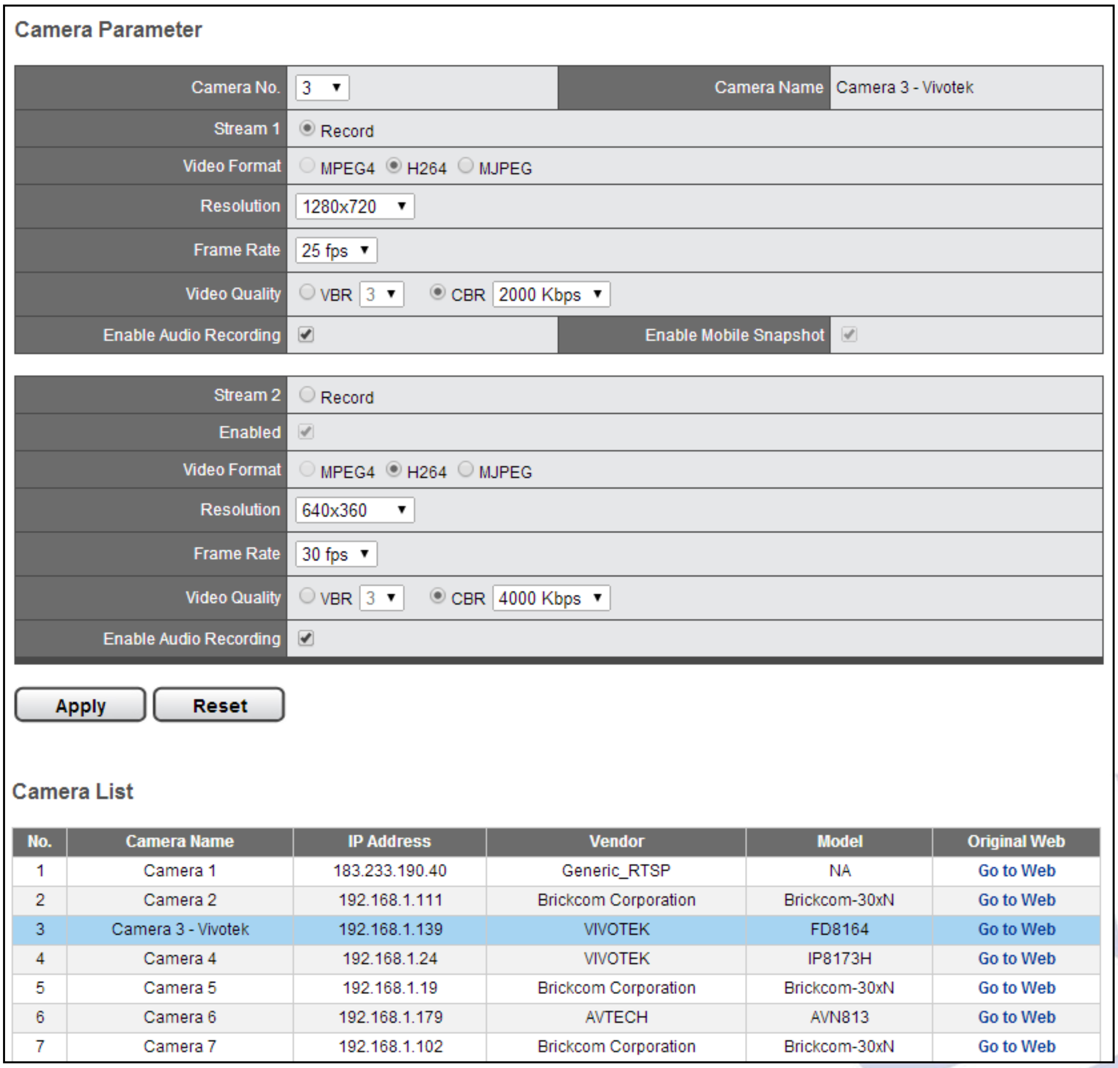
Please refer to Chapter2 - 2.3.6 Camera Settings.

5.1.2 Camera Parameter

User can directly modify camera's configuration such as video format, frame rate and resolution video quality via NVR in this page. Besides, NVR supports multi-stream for monitoring and recording.

Please select "**Camera Parameter**" from the drop-down menu of **IP Camera** to begin.




Camera Parameter

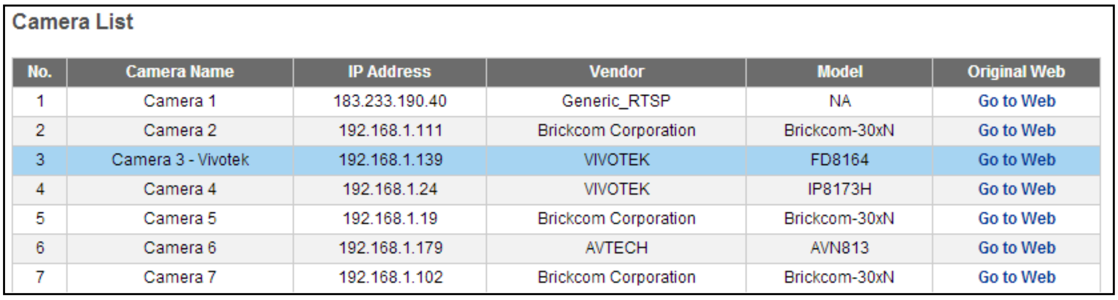
Camera No.	3 ▼	Camera Name	Camera 3 - Vivotek
Stream 1	● Record		
Video Format	○ MPEG4 ● H264 ○ MJPEG		
Resolution	1280x720 ▼		
Frame Rate	25 fps ▼		
Video Quality	○ VBR 3 ▼ ● CBR 2000 Kbps ▼		
Enable Audio Recording	☑	Enable Mobile Snapshot	☑

Stream 2	○ Record
Enabled	☑
Video Format	○ MPEG4 ● H264 ○ MJPEG
Resolution	640x360 ▼
Frame Rate	30 fps ▼
Video Quality	○ VBR 3 ▼ ● CBR 4000 Kbps ▼
Enable Audio Recording	☑

Camera List

No.	Camera Name	IP Address	Vendor	Model	Original Web
1	Camera 1	183.233.190.40	Generic_RTSP	NA	Go to Web
2	Camera 2	192.168.1.111	Brickcom Corporation	Brickcom-30xN	Go to Web
3	Camera 3 - Vivotek	192.168.1.139	VIVOTEK	FD8164	Go to Web
4	Camera 4	192.168.1.24	VIVOTEK	IP8173H	Go to Web
5	Camera 5	192.168.1.19	Brickcom Corporation	Brickcom-30xN	Go to Web
6	Camera 6	192.168.1.179	AVTECH	AVN813	Go to Web
7	Camera 7	192.168.1.102	Brickcom Corporation	Brickcom-30xN	Go to Web

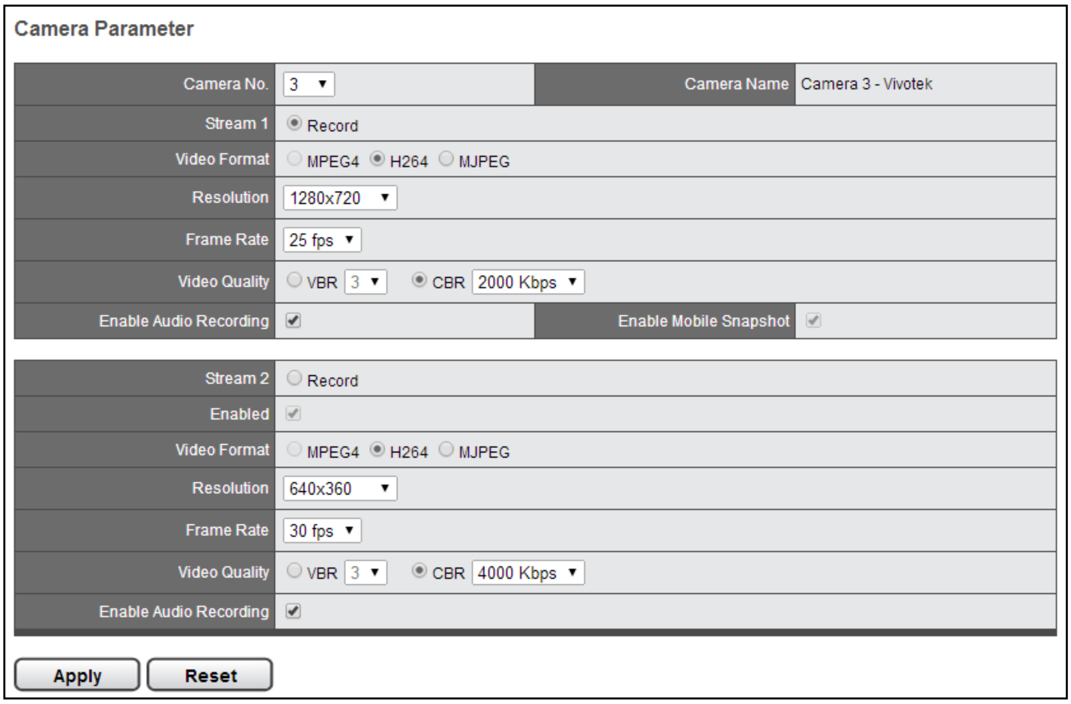
There are two parts in this section: **Camera Parameter** and **Camera List**.
Please select a camera in **Camera List** first.



Camera List

No.	Camera Name	IP Address	Vendor	Model	Original Web
1	Camera 1	183.233.190.40	Generic_RTSP	NA	Go to Web
2	Camera 2	192.168.1.111	Brickcom Corporation	Brickcom-30xN	Go to Web
3	Camera 3 - Vivotek	192.168.1.139	VIVOTEK	FD8164	Go to Web
4	Camera 4	192.168.1.24	VIVOTEK	IP8173H	Go to Web
5	Camera 5	192.168.1.19	Brickcom Corporation	Brickcom-30xN	Go to Web
6	Camera 6	192.168.1.179	AVTECH	AVN813	Go to Web
7	Camera 7	192.168.1.102	Brickcom Corporation	Brickcom-30xN	Go to Web

As you click one column turning into blue, please wait and the window below will appear to allow user to configure camera parameter.



Camera Parameter

Camera No.	3 ▾	Camera Name	Camera 3 - Vivotek
Stream 1	● Record		
Video Format	○ MPEG4 ● H264 ○ MJPEG		
Resolution	1280x720 ▾		
Frame Rate	25 fps ▾		
Video Quality	○ VBR 3 ▾ ● CBR 2000 Kbps ▾		
Enable Audio Recording	☑	Enable Mobile Snapshot	☑
Stream 2	○ Record		
Enabled	☑		
Video Format	○ MPEG4 ● H264 ○ MJPEG		
Resolution	640x360 ▾		
Frame Rate	30 fps ▾		
Video Quality	○ VBR 3 ▾ ● CBR 4000 Kbps ▾		
Enable Audio Recording	☑		

After loading camera's information, users can modify below camera parameter:

(1) Camera No.

Load Select a desired camera no. to switch camera in NVR's camera list.

(2) Stream 1/ Stream 2 (Recording Stream)

Decide one stream as recording stream for video recording between stream 1 and stream 2, if cameras support dual streams.

⚠ **Note:** It is suggested stream 1 is set for higher resolution and stream 2 for lower resolution, which helps users to choose the proper streaming on live view with intuitive control.

⚠ **Note:** On liveview interface, NVR will display videos in stream 1 from 1-screen to 12-screen display mode. NVR will display videos in stream 2 when display mode is above 16-screen.

⚠ **Note.** The default resolution of stream2 is CIF (360x 240).

(3) Video Format

Choose a video compression format for live view and recording: MPEG4, H.264 and MJPEG.

⚠ **Note**: Types of video format varies depending on the camera brands and models.

(4) Frame Rate

Frame rate of IP camera will be influenced by the network surroundings.

(5) Resolution

Select resolution from drop-down list for your camera.

(6) Video Quality

Select either "**VBR**" (Variable bit rate) or "**CBR**" (Constant bit rate) to set the video quality.

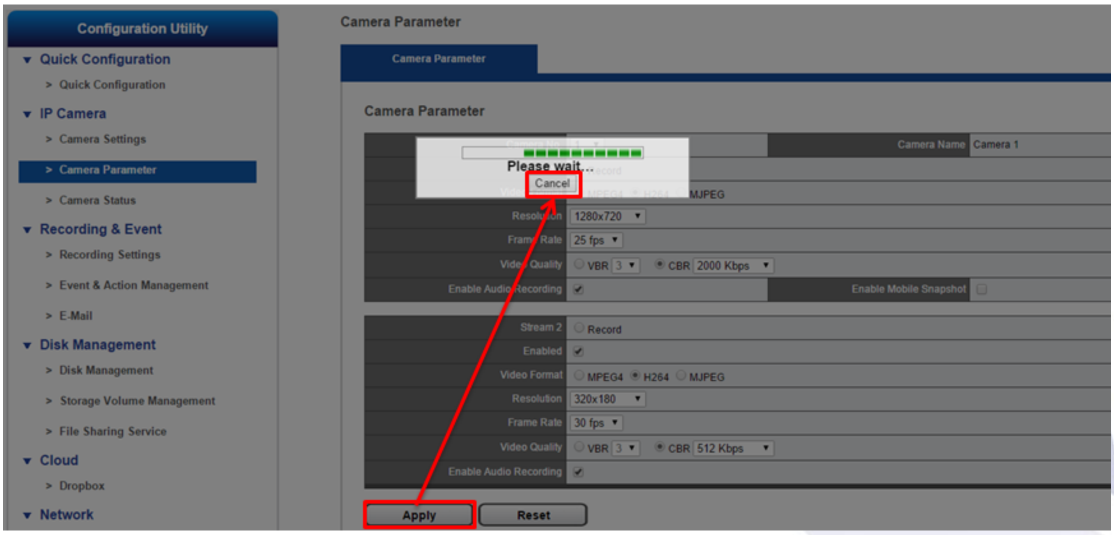
(7) Enable Audio Recording

To make audio recording function enable or disable.

(8) Enable Mobile Snapshot

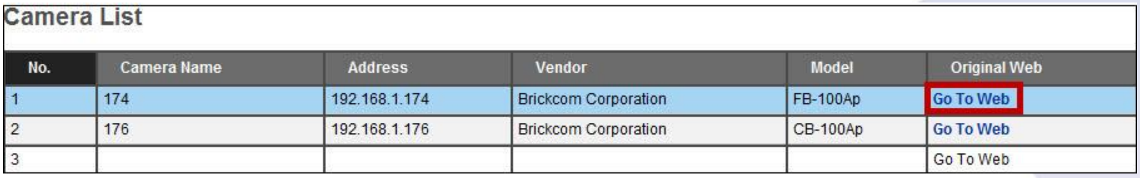
To make mobile snapshot function enable or disable.

Please click "**Apply**" button to save modified camera parameter.
You may click "**Cancel**" button to stop the execution.


Configuration Utility
Quick Configuration
Quick Configuration
IP Camera
Camera Settings
Camera Parameter
Camera Status
Recording & Event
Recording Settings
Event & Action Management
E-Mail
Disk Management
Disk Management
Storage Volume Management
File Sharing Service
Cloud
Dropbox
Network
Camera Parameter
Camera Parameter
Camera Parameter
Please wait...
Cancel
Apply
Reset

Camera Name: Camera 1
Resolution: 1280x720
Frame Rate: 25 fps
Video Quality: ○ VBR 3 ● CBR 2000 Kbps
Enable Audio Recording: ☑
Enable Mobile Snapshot: ☐
Stream 2: ○ Record
Enabled: ☑
Video Format: ○ MPEG4 ● H264 ○ MJPEG
Resolution: 320x180
Frame Rate: 30 fps
Video Quality: ○ VBR 3 ● CBR 512 Kbps
Enable Audio Recording: ☑

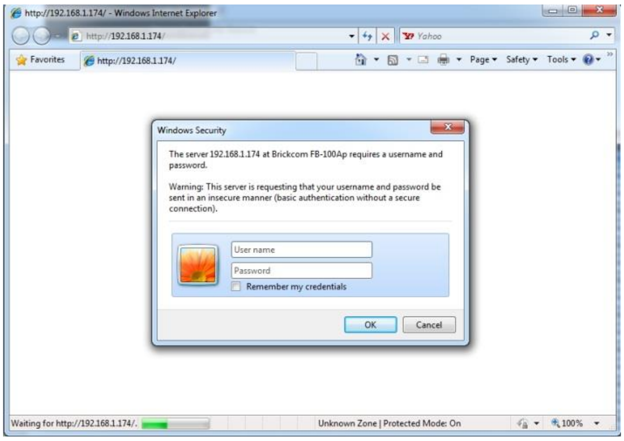
Furthermore, click "**Go to Web**" for advanced camera configuration in camera's user interface.



Camera List

No.	Camera Name	Address	Vendor	Model	Original Web
1	174	192.168.1.174	Brickcom Corporation	FB-100Ap	Go To Web
2	176	192.168.1.176	Brickcom Corporation	CB-100Ap	Go To Web
3					Go To Web

At the same time, a window will pop up to ask for user name and password for camera configuration.

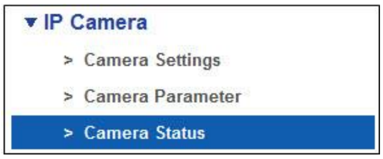

http://192.168.1.174/ - Windows Internet Explorer
http://192.168.1.174/
Yahoo
Favorites
http://192.168.1.174/
Page
Safety
Tools
Windows Security
User name
Password
Remember my credentials
OK
Cancel
Waiting for http://192.168.1.174/.
Unknown Zone | Protected Mode: On
100%

The server 192.168.1.174 at Brickcom FB-100Ap requires a username and password.

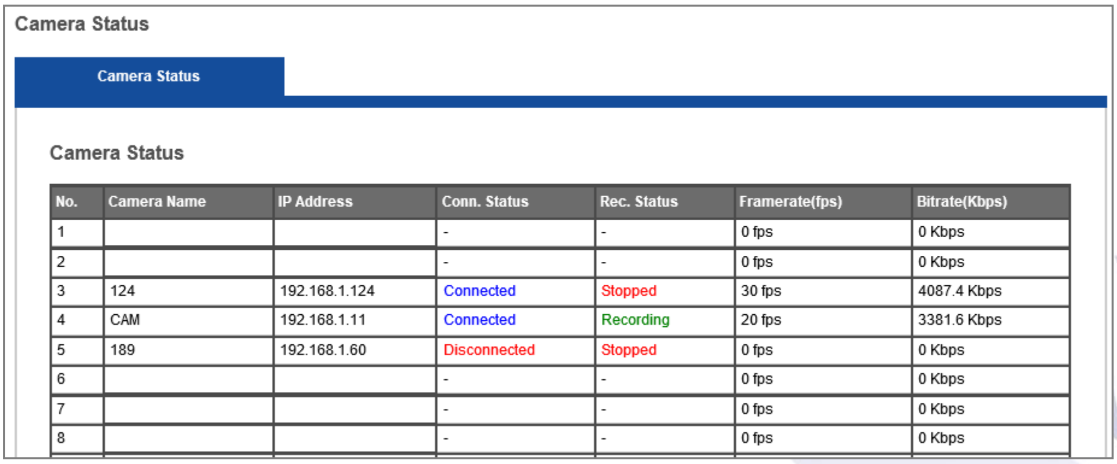
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).

5.1.3 Camera Status

Please select “**Camera Status**” from the drop-down menu of **IP Camera** to begin.


IP Camera
> Camera Settings
> Camera Parameter
> Camera Status

Camera List shows connection status of recording.

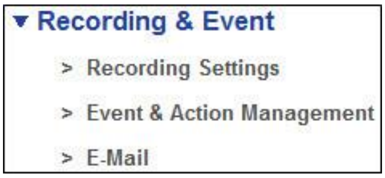

Camera Status
Camera Status

Camera Status

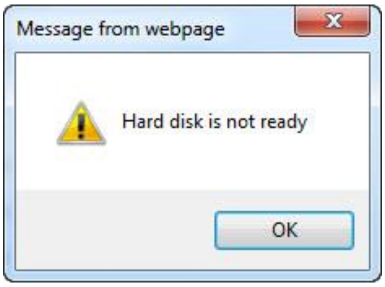
No.	Camera Name	IP Address	Conn. Status	Rec. Status	Framerate(fps)	Bitrate(Kbps)
1			-	-	0 fps	0 Kbps
2			-	-	0 fps	0 Kbps
3	124	192.168.1.124	Connected	Stopped	30 fps	4087.4 Kbps
4	CAM	192.168.1.11	Connected	Recording	20 fps	3381.6 Kbps
5	189	192.168.1.60	Disconnected	Stopped	0 fps	0 Kbps
6			-	-	0 fps	0 Kbps
7			-	-	0 fps	0 Kbps
8			-	-	0 fps	0 Kbps

5.2 Recording & Events

Recording & Events can provide different event modes and recording schedule for users to configure IP camera. Event & Action Management also allows users to combine various events and its triggered actions to achieve the security surveillance.


▼ Recording & Event
> Recording Settings
> Event & Action Management
> E-Mail

If the hard disk is not installed, the following window will pop up when you click “**Recording & Event**”.

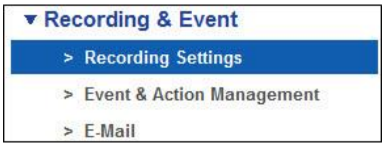

Message from webpage
OK

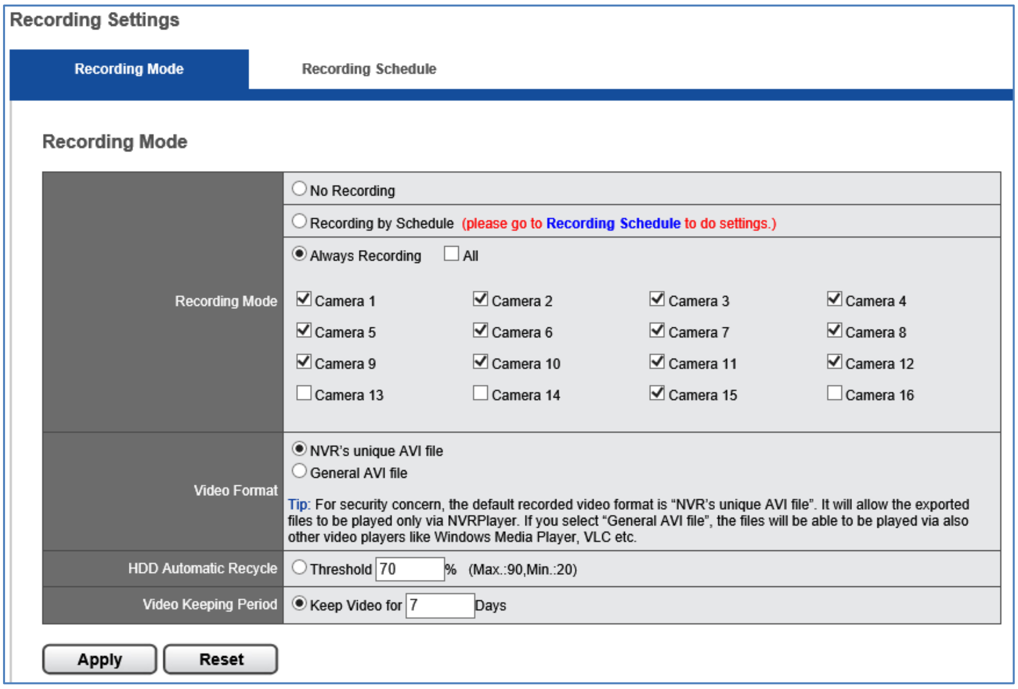
Hard disk is not ready

After the hard disk is ready, users can continue the following settings.

5.2.1 Recording Settings

Please select “**Recording Settings**” from the drop-down menu of **Recording & Event** to begin.


Recording & Event
> Recording Settings
> Event & Action Management
> E-Mail


Recording Settings
Recording Mode
Recording Schedule

Recording Mode

Recording Mode:
○ No Recording
○ Recording by Schedule (please go to Recording Schedule to do settings.)
● Always Recording ☐ All

☑ Camera 1	☑ Camera 2	☑ Camera 3	☑ Camera 4
☑ Camera 5	☑ Camera 6	☑ Camera 7	☑ Camera 8
☑ Camera 9	☑ Camera 10	☑ Camera 11	☑ Camera 12
☐ Camera 13	☐ Camera 14	☑ Camera 15	☐ Camera 16

Video Format:
● NVR's unique AVI file
○ General AVI file

Tip: For security concern, the default recorded video format is “NVR's unique AVI file”. It will allow the exported files to be played only via NVRPlayer. If you select “General AVI file”, the files will be able to be played via also other video players like Windows Media Player, VLC etc.

HDD Automatic Recycle: ○ Threshold 70 % (Max.:90,Min.:20)

Video Keeping Period: ● Keep Video for 7 Days

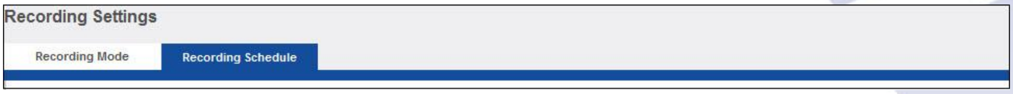
Apply
Reset

1. Recording Mode

Users can set the mode of “**No Recording**,” “**Recording by Schedule**” and “**Always Recording**” for each connected cameras.

(1) **No Recording**: Once “**No Recording**” is selected, all cameras will be disabled to record the video.

(2) **Recording by Schedule**: Once “**Schedule Recording**” is selected, users can set the scheduled time to record the video in two record modes, Always Record and Recording by Event. Please configure the schedule in “**Recording Schedule**” section.


Recording Settings
Recording Mode
Recording Schedule

(3) **Always Recording**: Users can select the camera or click “**All**” camera to apply “**Always Recording**” function. The video will be recorded continuously.

2. Video Format

NVR provides two video formats of recording videos for different safety concerns. Please select a suitable video format to record videos in NVR.

(1) **NVR's unique AVI file:** For security concern, the default recorded video format is "NVR's unique AVI file". It will allow the exported files to be played only via NVRPlayer.

(2) **General AVI file:** If users select "General AVI file", the files will be able to be played via also other video players like Windows Media Player, VLC etc.

3. Storage Management

NVR provides two ways to delete the recorded videos.

- **HDD Automatic Recycle**: Users can set storage capacity percentage for keeping videos to automatically overwrite the oldest video files. The maximum threshold is 90% while the minimum is 20%. NVR will check the HDD storage capacity in every 5 minutes. If HDD storage capacity is more than threshold, NVR will start to delete the oldest 16GB videos.

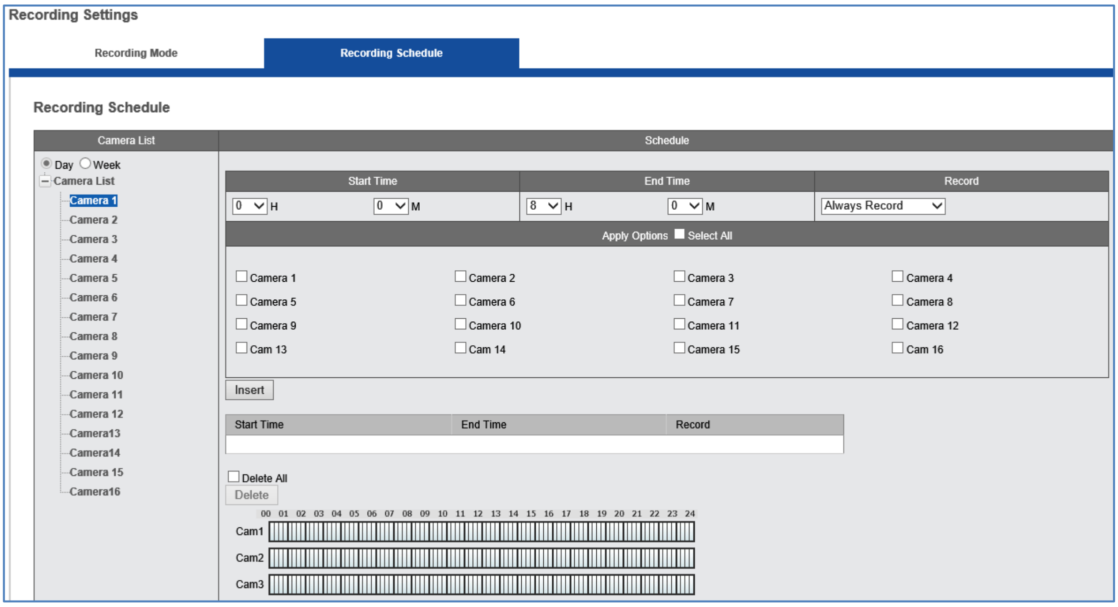
- **Video Keeping Period**: Users can set time period for keeping videos. NVR will check the video keeping time in every 10 minutes.
  For example, if the video is set to keep in 7 days and the storage of HDD has kept over 7 days, NVR will automatically delete the recorded videos of the earliest time.

  ⚠ **Note.** When HDD storage capacity is **over 94%**, NVR will start to recycle the oldest 16GB recorded videos. User can go to configuration page (Management > Log System > NVR Log) to check the record for security control.

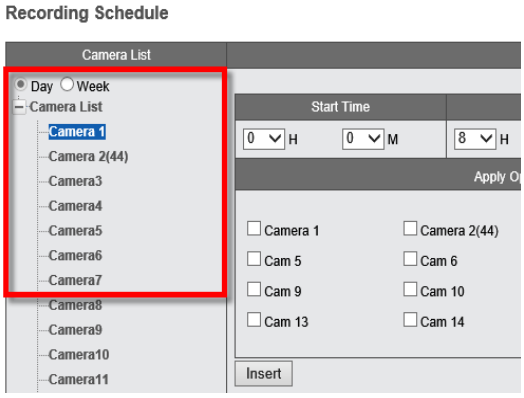
Click "**Apply**" to apply setting or click "**Reset**" to change the setting.

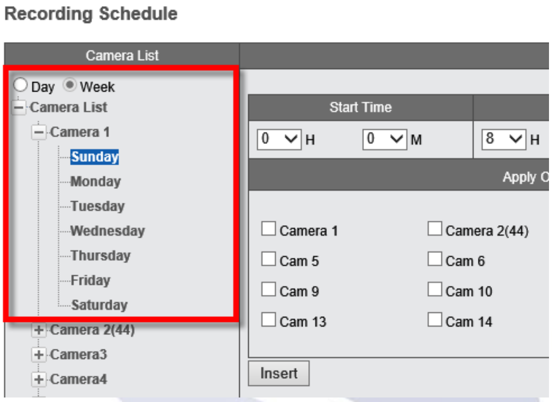
5.2.2 Recording Schedule

Users can configure Recording Schedule in desired time range and recording type (Always Record and Recording by Event) for all channels.


Recording Settings
Recording Mode
Recording Schedule
Recording Schedule
Camera List
Schedule
● Day ○ Week
Camera List
Camera 1
Camera 2
Camera 3
Camera 4
Camera 5
Camera 6
Camera 7
Camera 8
Camera 9
Camera 10
Camera 11
Camera 12
Camera13
Camera14
Camera 15
Camera16
Start Time
End Time
Record
0 H
0 M
8 H
0 M
Always Record
Apply Options
☐ Select All
☐ Camera 1
☐ Camera 2
☐ Camera 3
☐ Camera 4
☐ Camera 5
☐ Camera 6
☐ Camera 7
☐ Camera 8
☐ Camera 9
☐ Camera 10
☐ Camera 11
☐ Camera 12
☐ Cam 13
☐ Cam 14
☐ Camera 15
☐ Cam 16
Insert
Start Time
End Time
Record
☐ Delete All
Delete
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Cam1
Cam2
Cam3

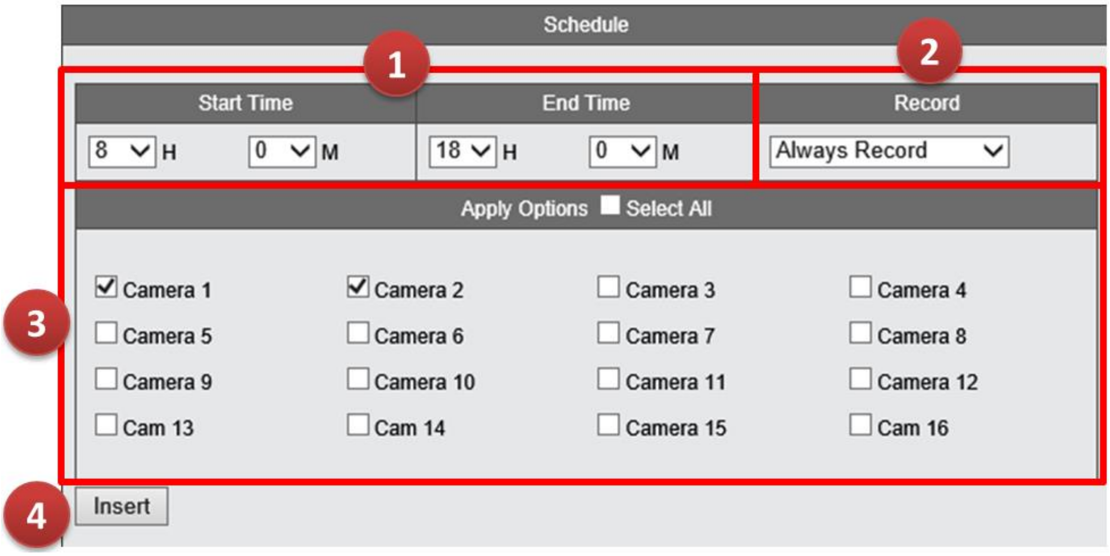
1. Select schedule **by day** or **by week**


Recording Schedule
Camera List
● Day ○ Week
Camera List
Camera 1
Camera 2(44)
Camera3
Camera4
Camera5
Camera6
Camera7
Camera8
Camera9
Camera10
Camera11
Start Time
0 H
0 M
8 H
Apply O
☐ Camera 1
☐ Camera 2(44)
☐ Cam 5
☐ Cam 6
☐ Cam 9
☐ Cam 10
☐ Cam 13
☐ Cam 14
Insert


Recording Schedule
Camera List
○ Day ● Week
Camera List
Camera 1
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Camera 2(44)
Camera3
Camera4
Start Time
0 H
0 M
8 H
Apply O
☐ Camera 1
☐ Camera 2(44)
☐ Cam 5
☐ Cam 6
☐ Cam 9
☐ Cam 10
☐ Cam 13
☐ Cam 14
Insert

2. Insert schedule

Select time range (Start/End time), recording type and channel for recording schedule and click “**Insert**.”



Start Time	End Time	Record
8 H 0 M	18 H 0 M	Always Record

Apply Options ☐ Select All

☑ Camera 1	☑ Camera 2	☐ Camera 3	☐ Camera 4
☐ Camera 5	☐ Camera 6	☐ Camera 7	☐ Camera 8
☐ Camera 9	☐ Camera 10	☐ Camera 11	☐ Camera 12
☐ Cam 13	☐ Cam 14	☐ Camera 15	☐ Cam 16

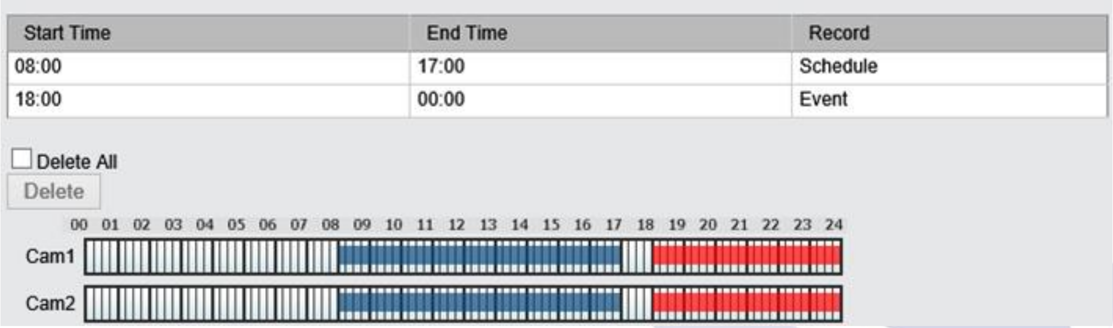
3. Recording type

Depending on recording requirements, users can two recording types:

(1) **Always Record:** If "**Always Record**" is selected, the video will be recorded continuously.

(2) **Record by Event:** Once "**Recording by Event**" is selected, all cameras will record the video when an event is triggered.

After inserting time range and channel, the time/camera bar displays the selected time.

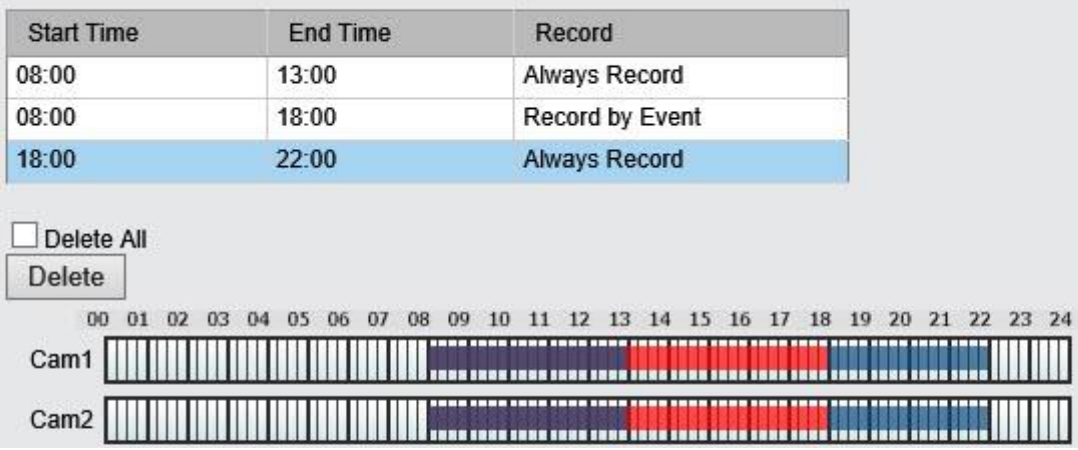


Start Time	End Time	Record
08:00	17:00	Schedule
18:00	00:00	Event

Camera bar will display record schedule in each camera bar. **Always Record** is in blue, **Record by Event** is in red.

Click "**Apply**" to finish setting or "**Reset**" to rearrange time and camera channel.

⚠ **Note**: A camera can set **multi-recording schedule** and **two recording types** at same time. The camera bar will display in purple when users set up both Always Record and Record by Event at the same time.

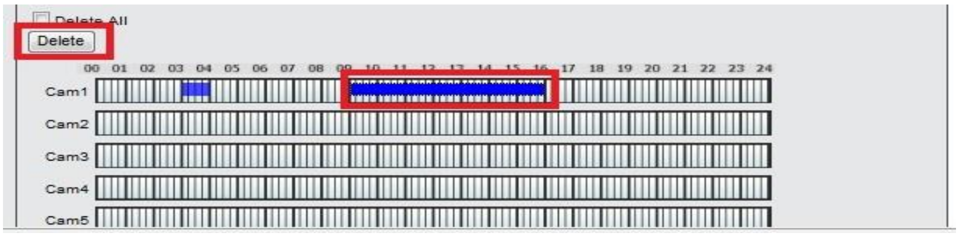


Start Time	End Time	Record
08:00	13:00	Always Record
08:00	18:00	Record by Event
18:00	22:00	Always Record

☐ Delete All
Delete
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Cam1
Cam2

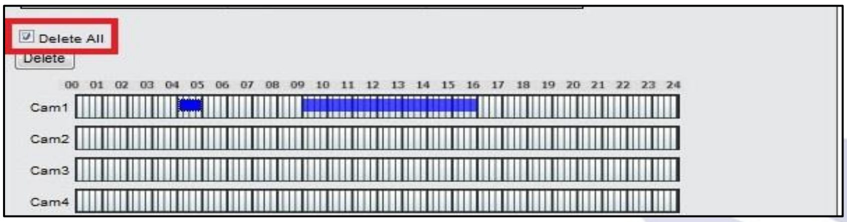
3. Delete schedule

Users can erase the specific time in recording schedule by selecting the time then click "**Delete**".


☐ Delete All
Delete
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Cam1
Cam2
Cam3
Cam4
Cam5

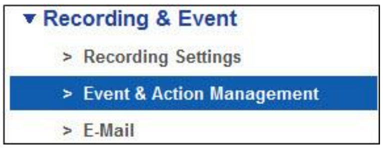
- **Delete All**

With checking the **Delete All** and then select the camera, users can remove the whole recording schedule for the certain camera after click "**Delete**".


☑ Delete All
Delete
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Cam1
Cam2
Cam3
Cam4

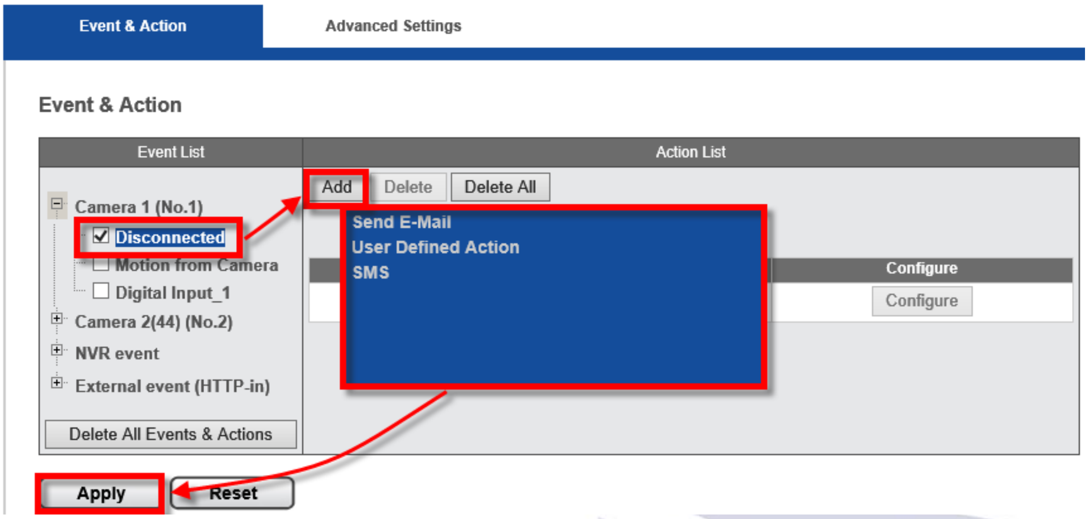
5.2.3 Event & Action Management

Please select “**Event & Action Management**” from the drop-down menu of **Recording & Event** to begin.


▾ Recording & Event
> Recording Settings
> Event & Action Management
> E-Mail

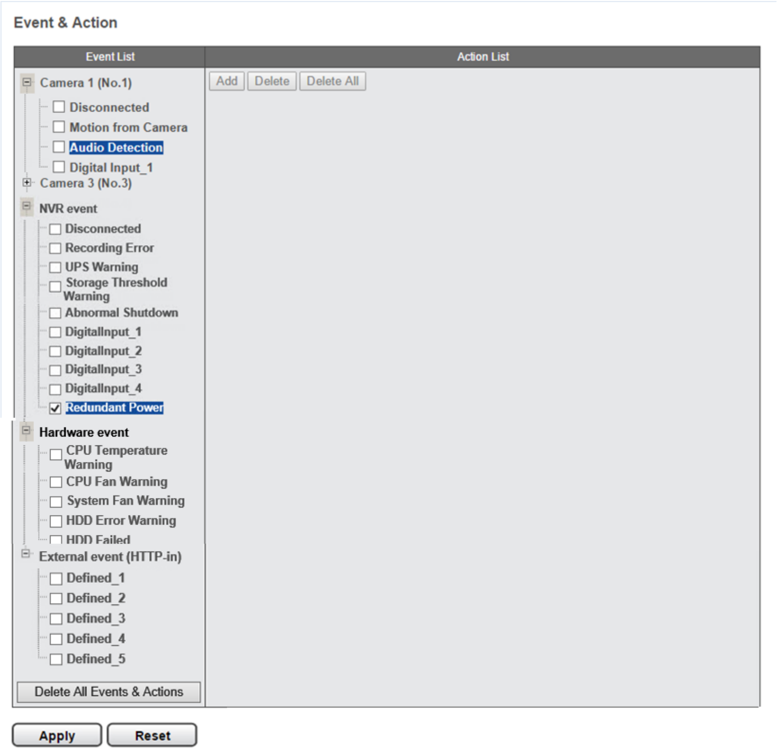
“**Event & Action Management**” allows users to define event setting that manage events and its corresponding action. Users can configure multiple types of event for camera, and NVR also provide various types of event for NVR system. It can strengthen security level during monitoring and recording to notify users when necessary. When an event occurs, NVR will perform certain actions.

Select an event type and click “**Add**” to select an action. Then, click “**Apply**” to save setting.


Event & Action
Advanced Settings
Event & Action
Event List
Action List
Camera 1 (No.1)
☑ Disconnected
☐ Motion from Camera
☐ Digital Input_1
Camera 2(44) (No.2)
NVR event
External event (HTTP-in)
Delete All Events & Actions
Add
Delete
Delete All
Send E-Mail
User Defined Action
SMS
Configure
Configure
Apply
Reset

⚠ **Note**: The action will be only triggered when the action is added to the event.

1. Event types


Event & Action
Event List
Action List
Add
Delete
Delete All
Camera 1 (No.1)
☐ Disconnected
☐ Motion from Camera
☐ Audio Detection
☐ Digital Input_1
Camera 3 (No.3)
NVR event
☐ Disconnected
☐ Recording Error
☐ UPS Warning
☐ Storage Threshold Warning
☐ Abnormal Shutdown
☐ DigitalInput_1
☐ DigitalInput_2
☐ DigitalInput_3
☐ DigitalInput_4
☑ Redundant Power
Hardware event
☐ CPU Temperature Warning
☐ CPU Fan Warning
☐ System Fan Warning
☐ HDD Error Warning
☐ HDD Failed
External event (HTTP-in)
☐ Defined_1
☐ Defined_2
☐ Defined_3
☐ Defined_4
☐ Defined_5
Delete All Events & Actions
Apply
Reset

(1) Camera event: Disconnected

(2) Camera event: Motion from Camera

(3) Camera event: Audio Detection

When the audio threshold level is higher than preset level, the alarm will be triggered.

⚠ **Note**: Please go to camera web page to configure audio level. This event is supported for AXIS IP camera for now.

(4) Camera event: Digital Input

⚠ **Note:** Double-clicking on it, users can redefine the name of Camera Digital Input.

(5) NVR event: Disconnected

(6) NVR event: Recording Error

(7) NVR event: UPS Warning

UPS Low Power Warning will warn users that UPS is nearly out of power before NVR automatically shutdown to sleep mode.

⚠ **Note**: Please **enable** this feature and fill in a number to trigger event on configuration page: Management > UPS Management > UPS Information. For more information, please refer to **5.6.7-2 UPS Management Settings**.

(8) NVR event: Storage Threshold Warning

Storage Threshold Warning is a friendly HDD recycle pre-notice design to give users the time to backup important recorded videos or to save recorded videos longer by using DIGIARRAY. Once NVR nearly reaches HDD automatic recycle threshold, NVR will send email to inform users that NVR will start to recycle the oldest recorded video soon.

⚠ **Note:** Depending on HDD recycling method, storage threshold warning will be triggered in below situations: (Please refer to **5.2.1-3 Recording Settings** to set up storage management.)

[1. HDD Automatic Recycle]: Event will be triggered when HDD storage space remains **5% prior to the threshold**.

[2. Video Keeping Period]: Event will be triggered **3 days before setting days**.

(9) NVR event: Abnormal Shutdown

When NVR resumes from a power outage, NVR will automatically recover and send notice that NVR has encountered abnormal shutdown. Besides, NVR will recover missing file caused from power outage.

(10) NVR event: Digital Input

(11) NVR event: Redundant Power

For NVR equipped with **rack-mount redundant power supply**, NVR offers **system buzzer** and other system notification such as **Email notification** and **Digital Output (DO)** to notify users of the failure of power supply.

(12) Hardware event: CPU Temperature Warning

(13) Hardware event: CPU Fan Warning

(14) Hardware event: System Fan Warning

(15) Hardware event: HDD Error Warning

HDD Error Warning is a pre-notice to inform users that HDD has encountered some errors. NVR can save videos in HDD.

(16) Hardware event: HDD Failed

In below two situations, HDD failed event will be triggered:

① NVR's HDD fails (NVR cannot save videos to that HDD)

② DIGIARRAY, the storage expansion box, is disconnected to NVR

(17) External event (HTTP-in)

Event could be triggered by **external HTTP-in CGI command**. It allows users to define **up to 5 different HTTP-in events**. With the "External Event", users can set its actions just like other events.

■ The format of external HTTP-in event

http://<NVR_IP>/login.cgi/cgi_main.cgi?cgiName=event_ipc.cgi&eventName=Defined_<int>

- <NVR_IP>is the IP of NVR that command need to be delivered to.

- <int>is defined for what number(1~5) of external HTTP-in event need to be triggered.

For example :

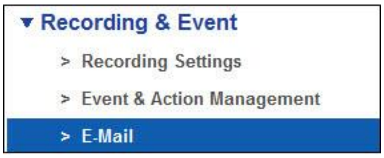
http://192.168.1.245/login.cgi/cgi_main.cgi?cgiName=event_ipc.cgi&eventName=Defined_3

- The CGI is for sending message to the NVR with IP 192.168.1.245 and trigger the external event #3

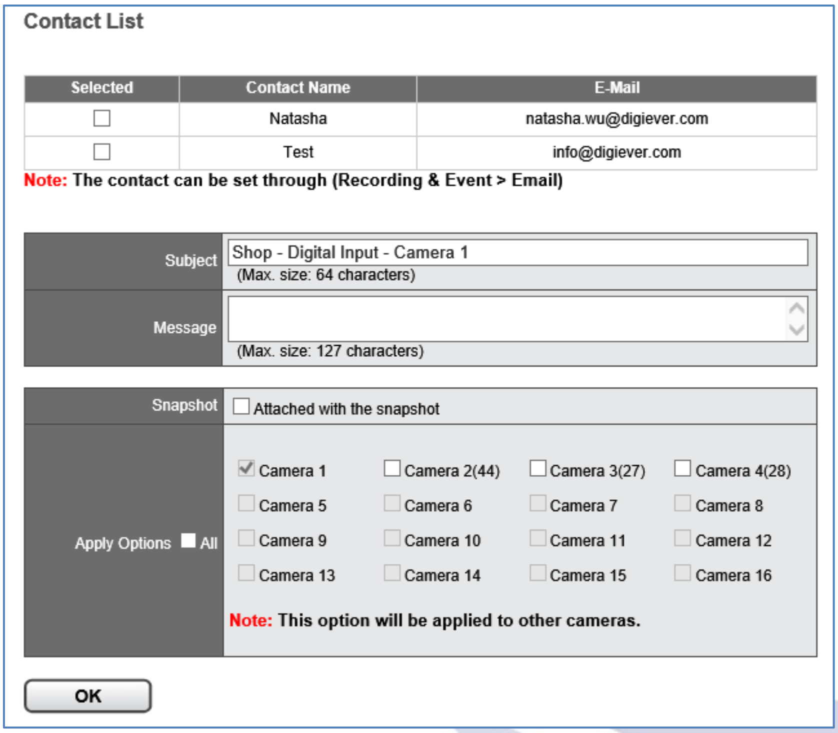
2. Action types

(1) Send E-Mail

E-Mail Configuration window will pop up as you add “**Send E-Mail**” to action. But there will be no contactor listed in the configuration at first, please go to add a new contactor in the following section “**E-Mail**.”



After contact information is added, **Contact List** shows the information of Name and E-Mail.



Contact List

Selected	Contact Name	E-Mail
☐	Natasha	natasha.wu@digiever.com
☐	Test	info@digiever.com

Note: The contact can be set through (Recording & Event > Email)

Subject: Shop - Digital Input - Camera 1
(Max. size: 64 characters)

Message:
(Max. size: 127 characters)

Snapshot: ☐ Attached with the snapshot

Apply Options ☐ All

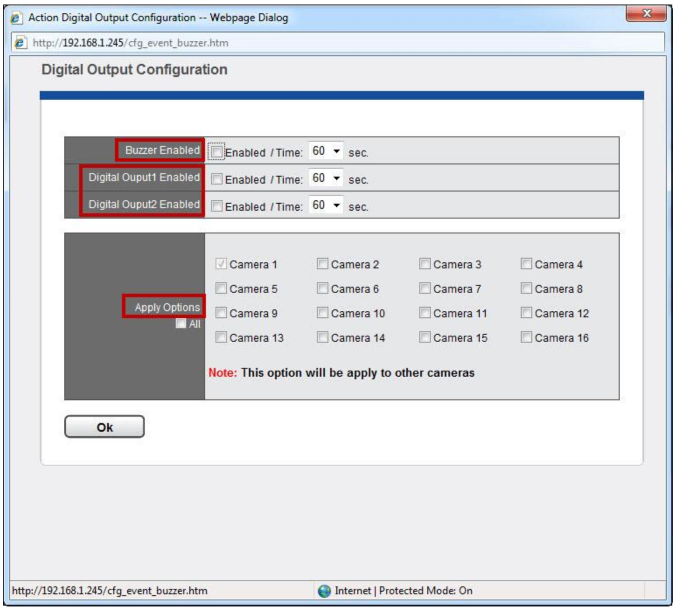
☑ Camera 1	☐ Camera 2(44)	☐ Camera 3(27)	☐ Camera 4(28)
☐ Camera 5	☐ Camera 6	☐ Camera 7	☐ Camera 8
☐ Camera 9	☐ Camera 10	☐ Camera 11	☐ Camera 12
☐ Camera 13	☐ Camera 14	☐ Camera 15	☐ Camera 16

Note: This option will be applied to other cameras.

① Select the contactor
② Edit the content on **Subject** and **Message** column
③ You can choose whether to **attach the snapshot** with Email (Optional)
④ Apply same setting with other cameras in “**Apply Options**” (Optional)
⑤ Click “**Ok**” button to finish E-MAIL Configuration.

E-Mail action will be triggered once per 20 seconds as the event is happening, which means if an event is lasting for one minute, NVR will send email 3 times per every 20 seconds.

(2) Digital Output and Camera Digital Output


Action Digital Output Configuration -- Webpage Dialog
http://192.168.1.245/cfg_event_buzzer.htm
Digital Output Configuration
Apply Options
All
Ok
http://192.168.1.245/cfg_event_buzzer.htm
Internet | Protected Mode: On

Buzzer Enabled ☐ Enabled / Time: 60 sec.

Digital Ouput1 Enabled ☐ Enabled / Time: 60 sec.

Digital Ouput2 Enabled ☐ Enabled / Time: 60 sec.

☑ Camera 1	☐ Camera 2	☐ Camera 3	☐ Camera 4
☐ Camera 5	☐ Camera 6	☐ Camera 7	☐ Camera 8
☐ Camera 9	☐ Camera 10	☐ Camera 11	☐ Camera 12
☐ Camera 13	☐ Camera 14	☐ Camera 15	☐ Camera 16

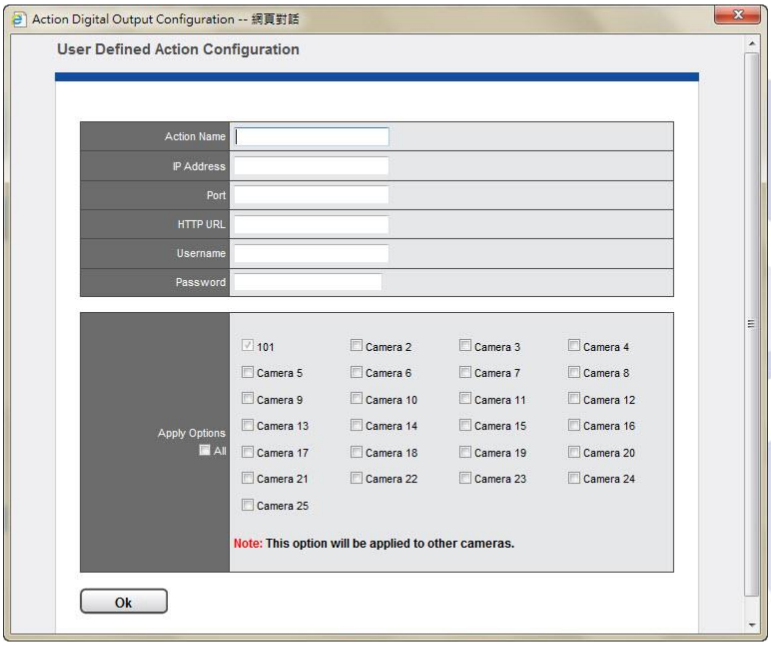
Note: This option will be apply to other cameras

Buzzer can be enabled up to sound for 60 seconds. **Digital Output1** and **Digital Output2** are supported by other digital outputs of server and can be enabled up to 60 seconds.

⚠ **Note**: User can press "**USB BACKUP**" button on the front panel of NVR for one second to stop the buzzer beeping.

(3) User Defined Action (HTTP-out)

User Defined Action allows users to send the specific HTTP command out when an event is triggered in order to manage devices such as power controller, fire/smoke protection device, etc.


Action Digital Output Configuration -- 網頁對話
User Defined Action Configuration
Action Name
IP Address
Port
HTTP URL
Username
Password
Apply Options
All
Ok

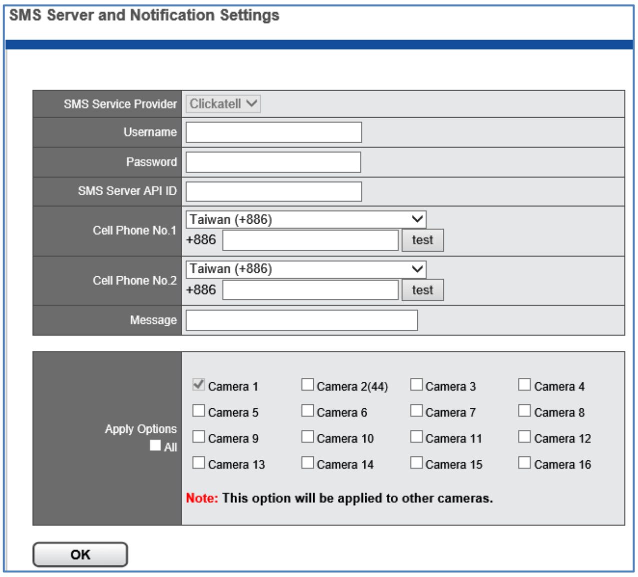
☑ 101	☐ Camera 2	☐ Camera 3	☐ Camera 4
☐ Camera 5	☐ Camera 6	☐ Camera 7	☐ Camera 8
☐ Camera 9	☐ Camera 10	☐ Camera 11	☐ Camera 12
☐ Camera 13	☐ Camera 14	☐ Camera 15	☐ Camera 16
☐ Camera 17	☐ Camera 18	☐ Camera 19	☐ Camera 20
☐ Camera 21	☐ Camera 22	☐ Camera 23	☐ Camera 24
☐ Camera 25			

Note: This option will be applied to other cameras.

(4) SMS

SMS stands for Short Message Service. Users can be notified by short message service while the event is triggered. The service is supported by Clickatell and users need to register for the service.

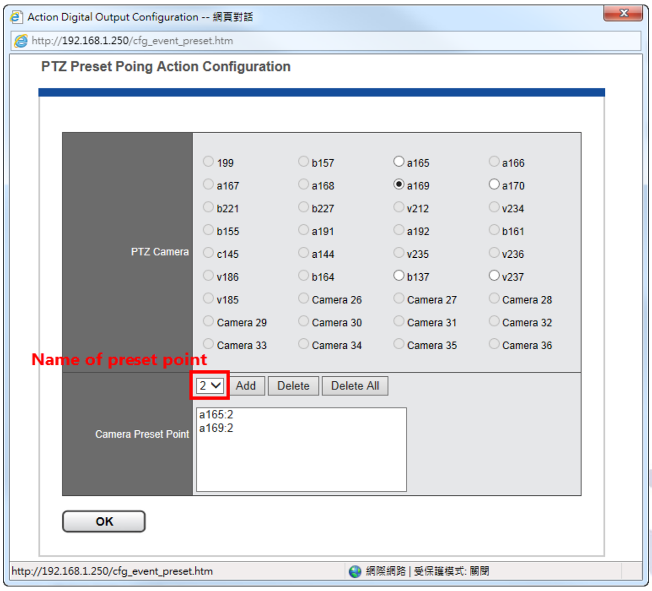
Before clicking "**OK**" button to save the setting, please click "**test**" button to ensure the account information and cell phone is correct



SMS Server and Notification Settings

SMS Service Provider: Clickatell
Username:
Password:
SMS Server API ID:
Cell Phone No.1: Taiwan (+886) +886
Cell Phone No.2: Taiwan (+886) +886
Message:
Apply Options: ☐ All
☑ Camera 1 ☐ Camera 2(44) ☐ Camera 3 ☐ Camera 4
☐ Camera 5 ☐ Camera 6 ☐ Camera 7 ☐ Camera 8
☐ Camera 9 ☐ Camera 10 ☐ Camera 11 ☐ Camera 12
☐ Camera 13 ☐ Camera 14 ☐ Camera 15 ☐ Camera 16
Note: This option will be applied to other cameras.

(5) Camera Preset Point



Action Digital Output Configuration -- 網頁對話
http://192.168.1.250/cfg_event_preset.htm

PTZ Preset Poing Action Configuration

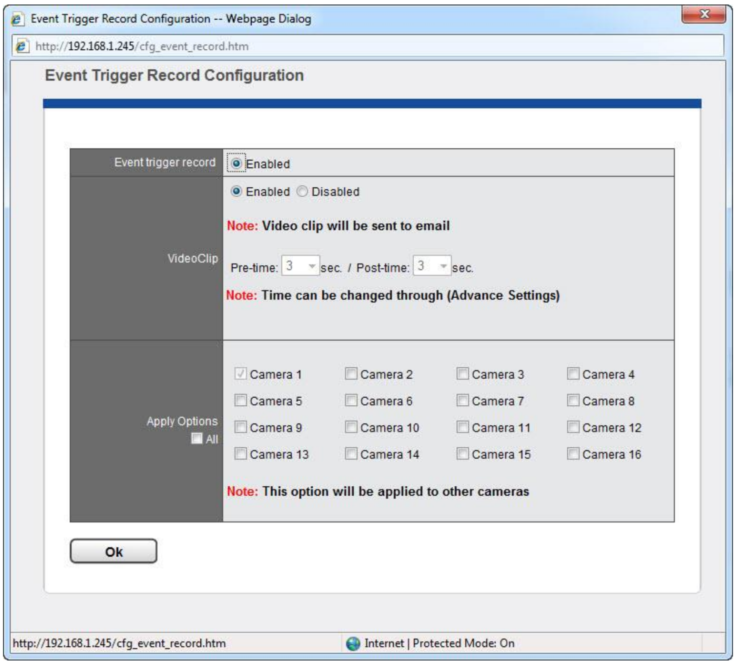
PTZ Camera:
○ 199 ○ b157 ○ a165 ○ a166
○ a167 ○ a168 ● a169 ○ a170
○ b221 ○ b227 ○ v212 ○ v234
○ b155 ○ a191 ○ a192 ○ b161
○ c145 ○ a144 ○ v235 ○ v236
○ v186 ○ b164 ○ b137 ○ v237
○ v185 ○ Camera 26 ○ Camera 27 ○ Camera 28
○ Camera 29 ○ Camera 30 ○ Camera 31 ○ Camera 32
○ Camera 33 ○ Camera 34 ○ Camera 35 ○ Camera 36

Camera Preset Point: 2
a165:2
a169:2

http://192.168.1.250/cfg_event_preset.htm 網際網路 | 受保護模式: 關閉

Once an event occurs, user can set up to 3 PTZ cameras to go to specific location individually so as to solidly protect secured areas.

(6) Event Triggered Record


Event Trigger Record Configuration -- Webpage Dialog
http://192.168.1.245/cfg_event_record.htm
Ok
http://192.168.1.245/cfg_event_record.htm
Internet | Protected Mode: On

Event Trigger Record Configuration

Event trigger record: ● Enabled

VideoClip: ● Enabled ○ Disabled

Note: Video clip will be sent to email

Pre-time: 3 sec. / Post-time: 3 sec.

Note: Time can be changed through (Advance Settings)

Apply Options ☐ All

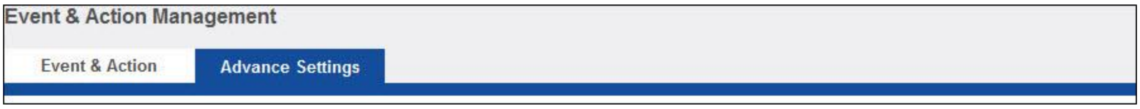
☑ Camera 1 ☐ Camera 2 ☐ Camera 3 ☐ Camera 4
☐ Camera 5 ☐ Camera 6 ☐ Camera 7 ☐ Camera 8
☐ Camera 9 ☐ Camera 10 ☐ Camera 11 ☐ Camera 12
☐ Camera 13 ☐ Camera 14 ☐ Camera 15 ☐ Camera 16

Note: This option will be applied to other cameras

NVR can enable **Event trigger record** and **Video Clip** when an event is triggered.

① **Event triggered record**: NVR records video and records every five minutes as the event continues happening. Recording type in playback page displays as **Event in red footage**.

② **Video Clip**: Video clip will be sent by E-mail and you can change the Pre-time and Post-time through “**Advanced Settings**.” Recording type in playback page displays as **Video Clip in yellow footage**.


Event & Action Management
Event & Action
Advance Settings

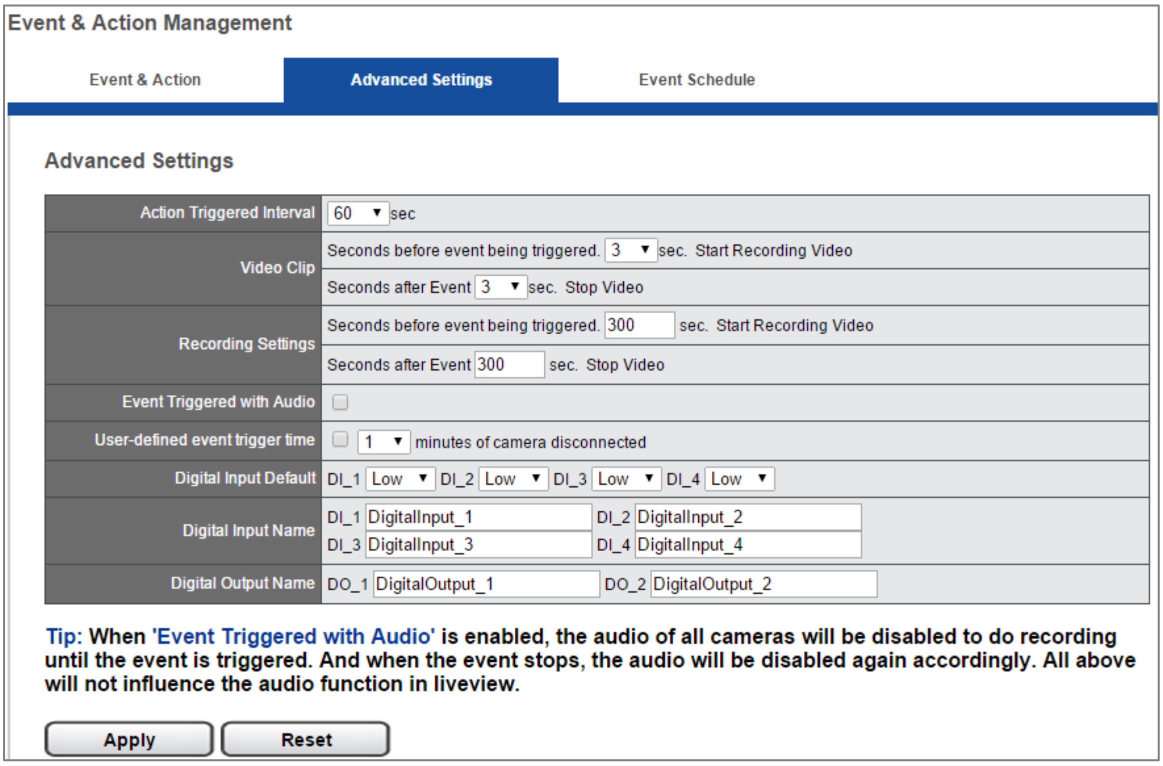
(7) SNMP Trap

To make users easily manage and monitor devices on network, NVR supports **SNMP (Simple Network Management Protocol)** to intelligently notify users of event triggered via SNMP trap.

Users can configure **up to 8 event types** to inform security guard of event occurred via SNMP server, including **camera disconnected**, **recording error, UPS low power warning, CPU temperature warning, CPU fan warning, system fan warning, HDD error warning** and **HDD fail warning.**

⚠ **Note:** Please go to configuration page (Management > SNMP) to connect a SNMP server in advance.

5.2.4 Advanced Setting



Advanced Settings

Action Triggered Interval	60 ▼ sec
Video Clip	Seconds before event being triggered. 3 ▼ sec. Start Recording Video Seconds after Event 3 ▼ sec. Stop Video
Recording Settings	Seconds before event being triggered. 300 sec. Start Recording Video Seconds after Event 300 sec. Stop Video
Event Triggered with Audio	☐
User-defined event trigger time	☐ 1 ▼ minutes of camera disconnected
Digital Input Default	DI_1 Low ▼ DI_2 Low ▼ DI_3 Low ▼ DI_4 Low ▼
Digital Input Name	DI_1 DigitalInput_1 DI_2 DigitalInput_2 DI_3 DigitalInput_3 DI_4 DigitalInput_4
Digital Output Name	DO_1 DigitalOutput_1 DO_2 DigitalOutput_2

Tip: When 'Event Triggered with Audio' is enabled, the audio of all cameras will be disabled to do recording until the event is triggered. And when the event stops, the audio will be disabled again accordingly. All above will not influence the audio function in liveview.

1. **Action Triggered Interval**

   Users can set proper time interval when events are triggered in sequence.

2. **Video Clip and Recording Settings**

   Users can set Pre-time of record and Post-time of record for video clip and event recording.

   Pre-time of record can up to 300 seconds before the event is triggered and Post-time of record can up to 300 seconds after the event ends.

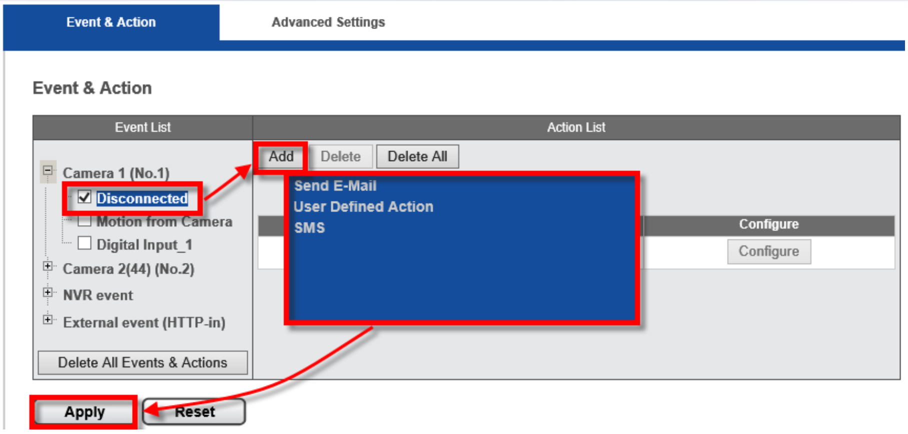
3. **Event Triggered with Audio**

   Users can set up whether audio is recorded only when an event is triggered. When "**Event Triggered with Audio**" is enabled, camera audio will be recorded when an event is triggered. When the event stops, the audio will be disabled again automatically.

4. **User-defined Event Tigger Time**

   For unstable network surveillance environment, NVR allows user to define event trigger time for camera disconnection (named **Camera connection lost delay)** to decrease the possibility of error alarm.

   Please go to configuration page (Recording & Event > Event & Action Management > Event & Action) to configure **camera disconnected** as event and set up corresponding action.


Event & Action
Advanced Settings
Event & Action
Event List
Action List
Camera 1 (No.1)
☑ Disconnected
☐ Motion from Camera
☐ Digital Input_1
Camera 2(44) (No.2)
NVR event
External event (HTTP-in)
Delete All Events & Actions
Add
Delete
Delete All
Send E-Mail
User Defined Action
SMS
Configure
Configure
Apply
Reset

5. **Digital Input Default**

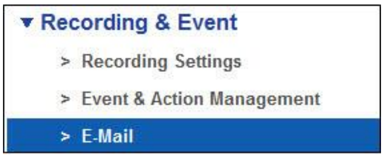
User can set up default High/Low setting of digital inputs for different digital input device. (Default is Low) Once one of digital inputs becomes High, NVR will treat it as an event.

6. **Digital Input/ Output Name**

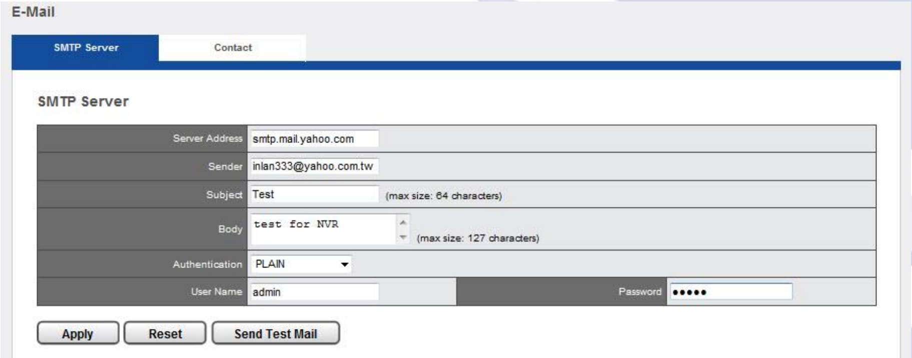
User can give the specific name to all digital inputs (DI) and all digital outputs (DO) to save time to set up event and actions with no need to remember the function of each DI/DO one by one.

5.2.5 E-Mail

Please select "**E-Mail**" from the drop-down menu of **Recording & Event** to begin.


Recording & Event
> Recording Settings
> Event & Action Management
> E-Mail

1. SMTP Server


E-Mail
SMTP Server
Contact
SMTP Server
Apply
Reset
Send Test Mail

Server Address	smtp.mail.yahoo.com
Sender	inlan333@yahoo.com.tw
Subject	Test (max size: 64 characters)
Body	test for NVR (max size: 127 characters)
Authentication	PLAIN
User Name	admin
Password	●●●●●

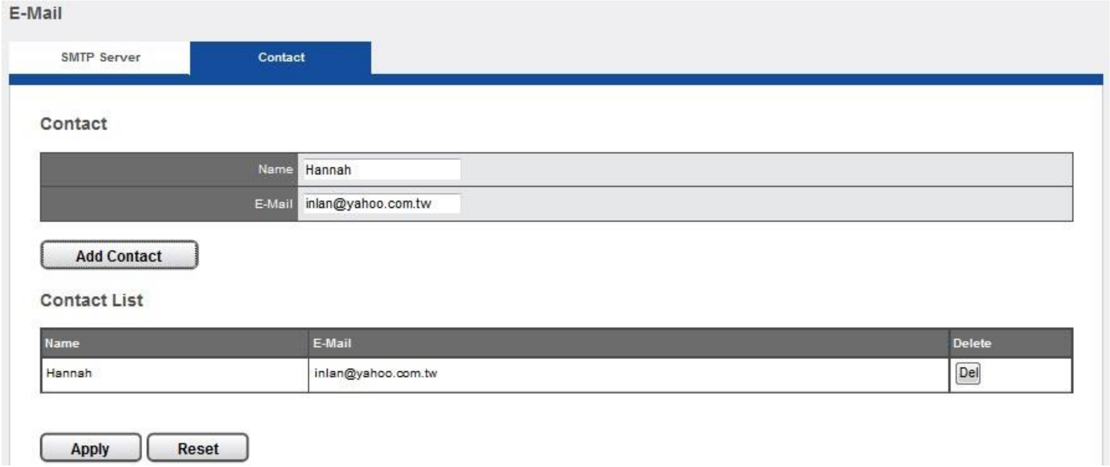
- **Server Address**: Enter the Server Address of the SMTP server.
- **Sender**: Specify sender's E-Mail in the "**Sender**" field.
- **Subject**: Enter the Subject.
- **Body**: Enter the content.

- **Authentication**: NVR provides four types of authentication for SMTP Server, including “**PLAIN**”, “**LOGIN**”, “**LOGIN with TLS**” or “**Disable**”.
  “**Disable**” means users can use anonymous SMTP server to quickly send email notification with no need to configure sender account (username/password). This feature can greatly save MIS/administrator’s time to set up Email setting when setting plenty of Email accounts, especially for large-scale institutions or companies.
- **User name**: Specify username.
- **Password**: Specify user password.

Click “**Apply**” to finish or “**Send Test Mail**” to check the availability.

2. Contact

Add contactor by entering name and E-Mail and click “**Add Contact**.”



Contact

Name: Hannah

E-Mail: inlan@yahoo.com.tw

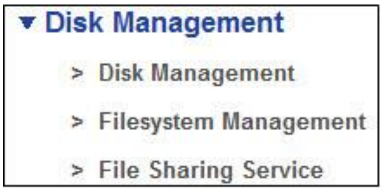
Contact List

Name	E-Mail	Delete
Hannah	inlan@yahoo.com.tw	Del

Contact List will show the information you entered. Please click “**Apply**” to finish settings. Users can delete the contactor by clicking “**Delete**” button.

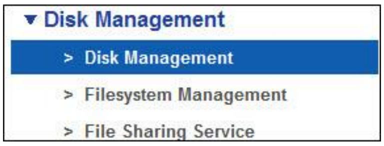
5.3 Disk Management

NVR can create new RAID disk or delete/format the RAID disk. Also, users can manage NVR’s storage device for data transmission and file sharing service.


▼ Disk Management
> Disk Management
> Filesystem Management
> File Sharing Service

5.3.1 Disk Management

Please select “**Disk Management**” from the drop-down menu of **Disk Management** to begin.


▼ Disk Management
> Disk Management
> Filesystem Management
> File Sharing Service

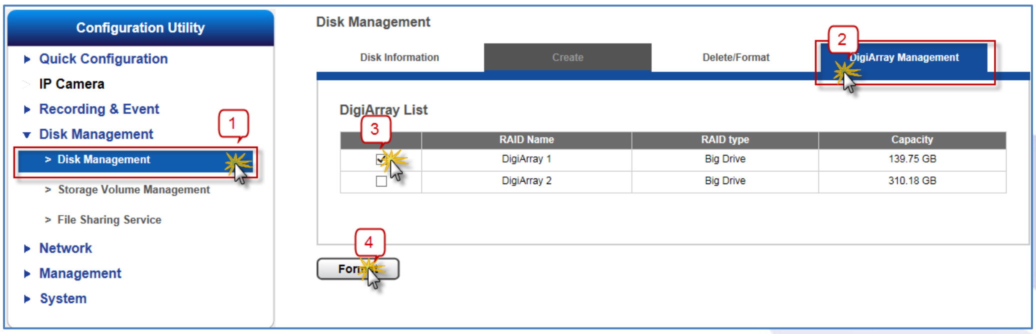
1. Disk Information

The steps for creating and deleting NVR’s hard disk, please refer to **2.3.5 Disk Management.**

2. Add DIGIARRAY to NVR

(1) Format DIGIARRAY to add its volume into NVR’s volume pool

Choose the volume which one you want to add into the volume pool and press “**Format**” button.


Configuration Utility
Quick Configuration
IP Camera
Recording & Event
Disk Management
> Disk Management
> Storage Volume Management
> File Sharing Service
Network
Management
System
1
Disk Management
Disk Information
Create
Delete/Format
DigiArray Management
2
3
4
Format

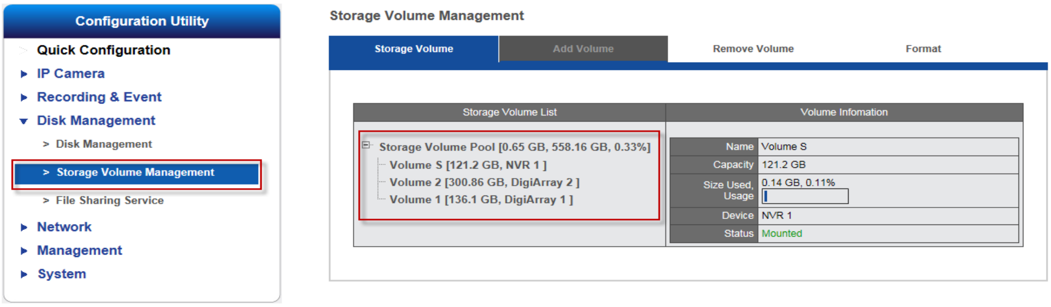
DigiArray List

	RAID Name	RAID type	Capacity
☑	DigiArray 1	Big Drive	139.75 GB
☐	DigiArray 2	Big Drive	310.18 GB

⚠ **Note:** Please make sure NVR and DIGIARRARY are **power on** with a complete RAID type, before you start to connect DIGIARRAY to NVR.

(2) Check status

You could find the information of storage volume pool from Storage Volume Management page.

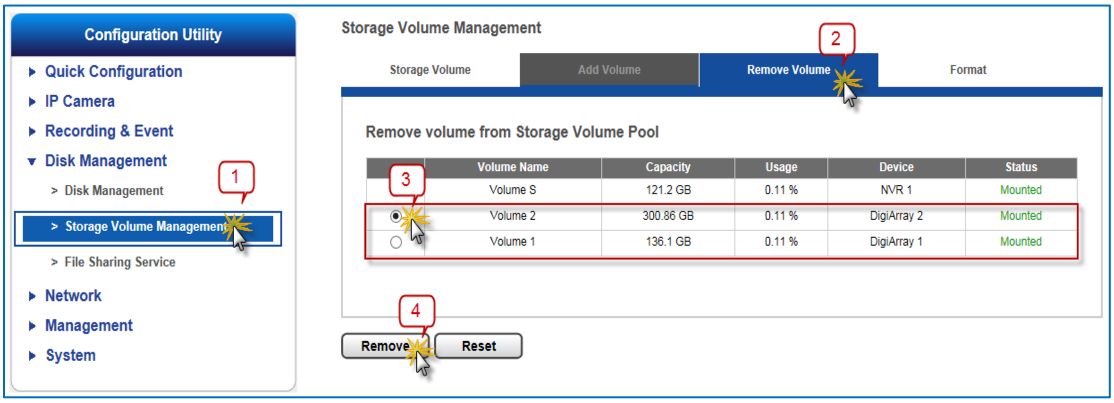

Configuration Utility
Quick Configuration
IP Camera
Recording & Event
Disk Management
> Disk Management
> Storage Volume Management
> File Sharing Service
Network
Management
System
Storage Volume Management
Storage Volume
Add Volume
Remove Volume
Format
Storage Volume List
Volume Infomation

Storage Volume Pool [0.65 GB, 558.16 GB, 0.33%]
- Volume S [121.2 GB, NVR 1]
- Volume 2 [300.86 GB, DigiArray 2]
- Volume 1 [136.1 GB, DigiArray 1]

Name	Volume S
Capacity	121.2 GB
Size Used, Usage	0.14 GB, 0.11%
Device	NVR 1
Status	Mounted

3. Remove DIGIARRAY from NVR

Please follow below steps to remove DIGIARRAY from NVR to prevent data loss.

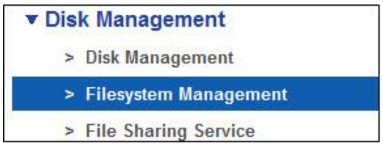

Configuration Utility
Quick Configuration
IP Camera
Recording & Event
Disk Management
> Disk Management
> Storage Volume Management
> File Sharing Service
Network
Management
System
1
Storage Volume Management
Storage Volume
Add Volume
Remove Volume
Format
2
3
4
Remove
Reset

Remove volume from Storage Volume Pool

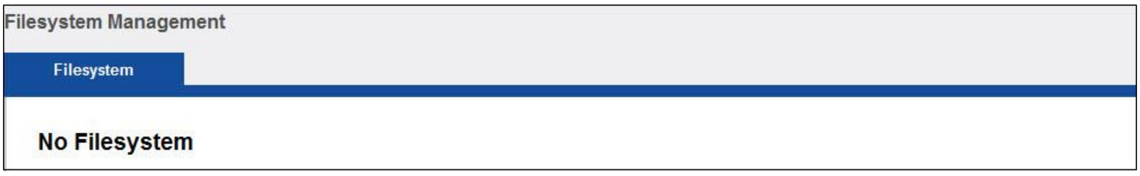
	Volume Name	Capacity	Usage	Device	Status
	Volume S	121.2 GB	0.11 %	NVR 1	Mounted
●	Volume 2	300.86 GB	0.11 %	DigiArray 2	Mounted
○	Volume 1	136.1 GB	0.11 %	DigiArray 1	Mounted

5.3.2 File System Management

Please select "**File system Management**" from the drop-down menu of **Disk Management** to begin.

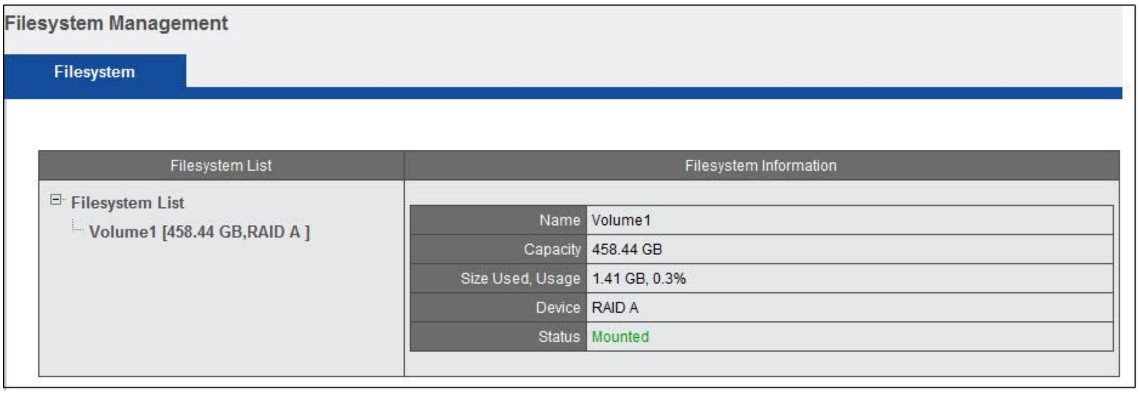

▼ Disk Management
> Disk Management
> Filesystem Management
> File Sharing Service

When there is no hard disk installed in the NVR, the page will show "**No File system.**"


Filesystem Management
Filesystem

No Filesystem

Once the hard disk is installed, the file system will show the volume of RAID as below.

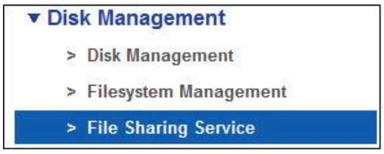

Filesystem Management
Filesystem
Filesystem List
Filesystem Information
Filesystem List
Volume1 [458.44 GB,RAID A]

Name	Volume1
Capacity	458.44 GB
Size Used, Usage	1.41 GB, 0.3%
Device	RAID A
Status	Mounted

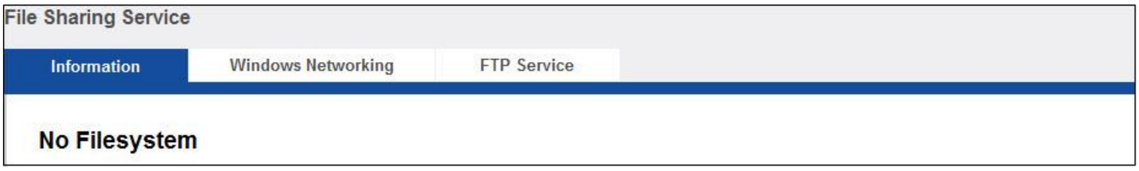
File system provides an efficient method to organize data expected to be retained after a program is terminated by providing procedures to store, retrieve and update data, as well as manage the available space on the device.

5.3.3 File Sharing Service

Please select “**File Sharing Service**” from the drop-down menu of **Disk Management** to begin.


▼ Disk Management
> Disk Management
> Filesystem Management
> File Sharing Service

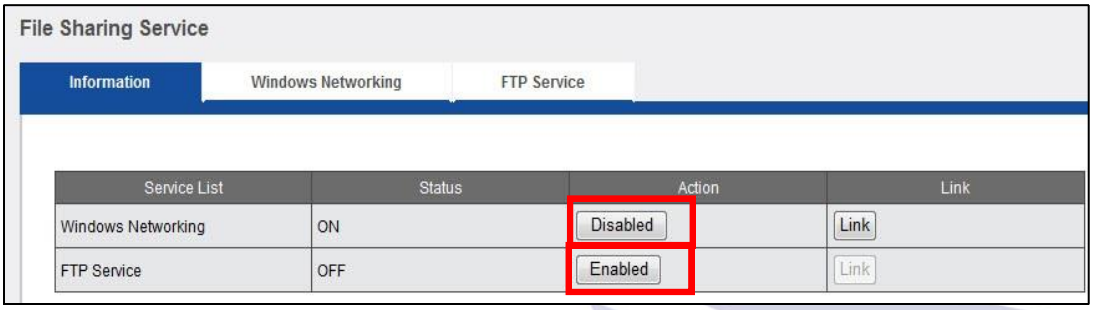
Arrange data transmission service including **Windows Networking** and **FTP service**. When there is no hard disk installed in the NVR, the screen will show “**No Filesystem.**”


File Sharing Service
Information
Windows Networking
FTP Service

No Filesystem

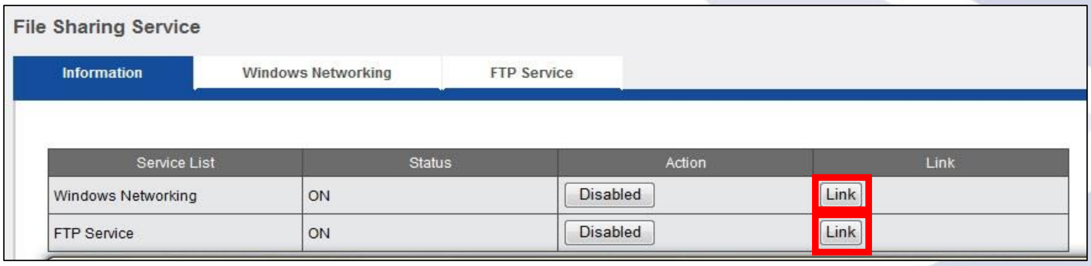
1. Information

Once the hard disk is installed, the filesystem will show status as below. Turn On or turn off sharing service to enable or disable **Windows Networking** and **FTP service**.

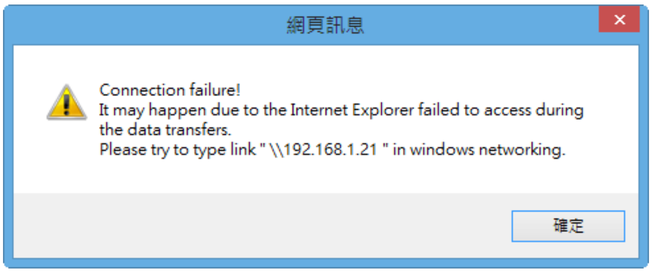

File Sharing Service
Information
Windows Networking
FTP Service

Service List	Status	Action	Link
Windows Networking	ON	Disabled	Link
FTP Service	OFF	Enabled	Link

After the service is enabled, by using link button on the File Sharing Service page, users can open the dialog of windows to share service and FTP service directly.


File Sharing Service
Information
Windows Networking
FTP Service

Service List	Status	Action	Link
Windows Networking	ON	Disabled	Link
FTP Service	ON	Disabled	Link

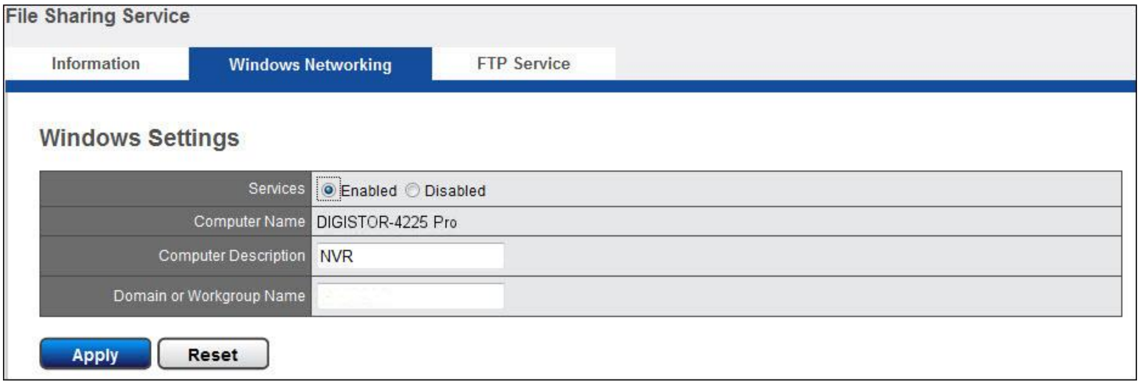


網頁訊息

Connection failure!
It may happen due to the Internet Explorer failed to access during the data transfers.
Please try to type link " \\192.168.1.21 " in windows networking.

2. Windows Networking

In Windows Networking field, users can enable or disable the services and **Computer Name** is already shown. **Computer Description** and **Domain or Workgroup Name** can be changed.



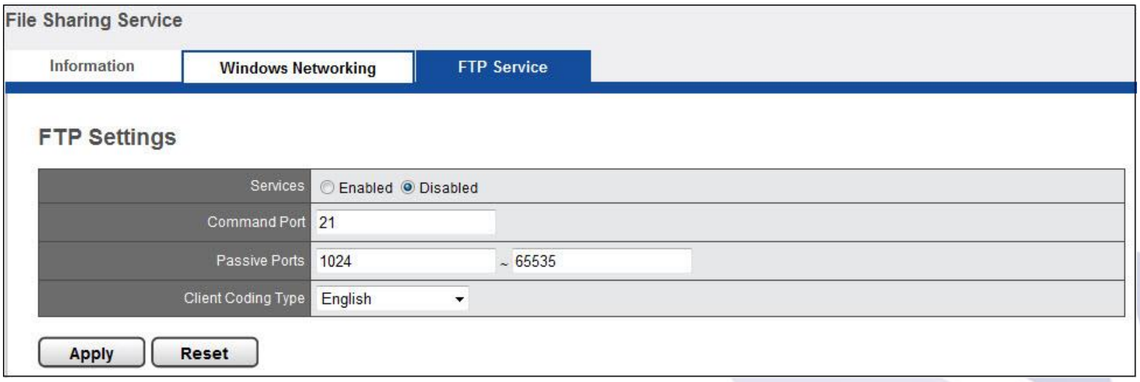
File Sharing Service
Information
Windows Networking
FTP Service

Windows Settings

Services	● Enabled ○ Disabled
Computer Name	DIGISTOR-4225 Pro
Computer Description	NVR
Domain or Workgroup Name	[illegible]

Apply
Reset

3. FTP Service



File Sharing Service
Information
Windows Networking
FTP Service

FTP Settings

Services	○ Enabled ● Disabled
Command Port	21
Passive Ports	1024 ~ 65535
Client Coding Type	English

Apply
Reset

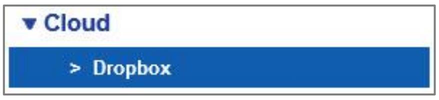
In FTP Settings, users can enable or disable FTP Services. User can arrange **Command Port** and **Passive Port**.

Please click “**Apply**” to finish FTP settings.

5.4 Cloud

NVR provides cloud backup to upload recorded files to Dropbox. With cloud backup, users can share recorded files with a link.

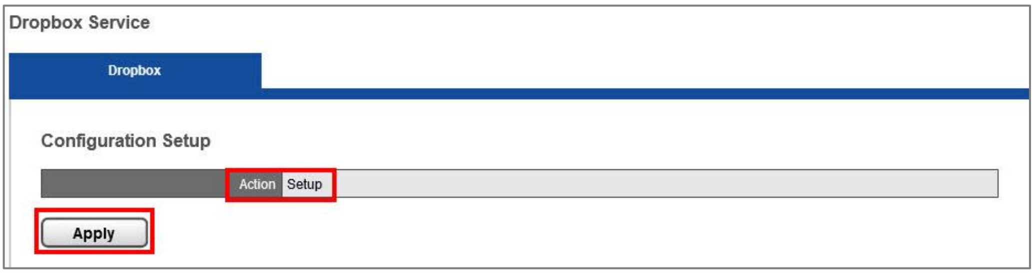
Please select "**Dropbox**" from the drop-down menu of **Cloud** to begin.


▼ Cloud
> Dropbox

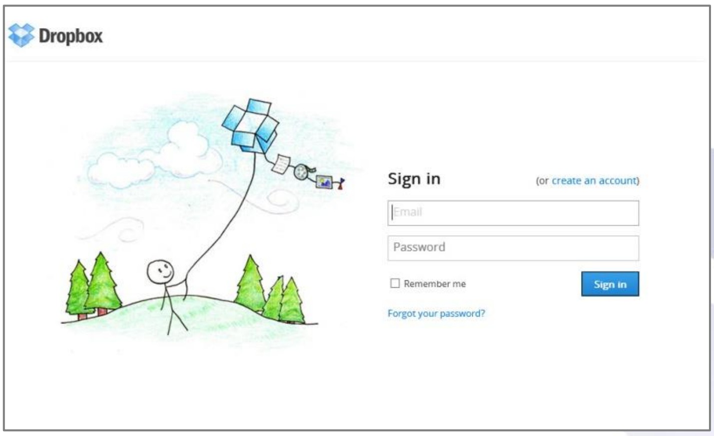
5.4.1 Setup Dropbox Service

Please click "**Apply**" to start Dropbox webpage connection and to establish a folder in NVR.

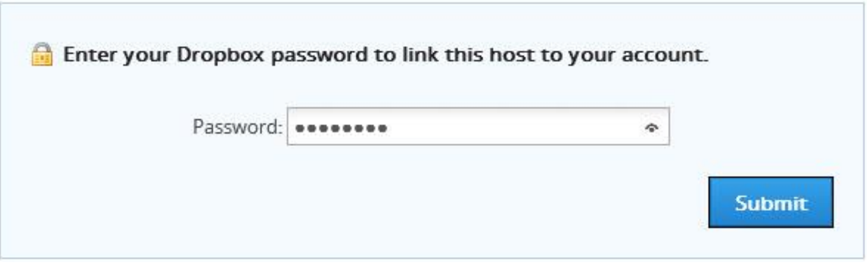
⚠ **Note:** It is suggested to create a new Dropbox account for NVR video sharing. The documents saved in your Dropbox account will start sync to Dropbox folder created in NVR after NVR successfully connects to a Dropbox account.


Dropbox Service
Dropbox
Configuration Setup
Action
Setup
Apply

At the same time, a window will pop up to ask users to sign in account.


Dropbox
Sign in
(or create an account)
Email
Password
☐ Remember me
Sign in
Forgot your password?

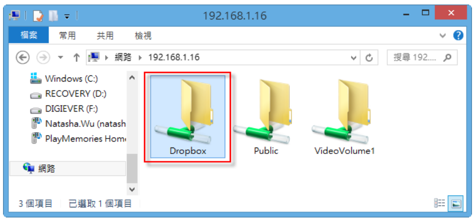
Another window will pop up to enter Dropbox password again to connect NVR.

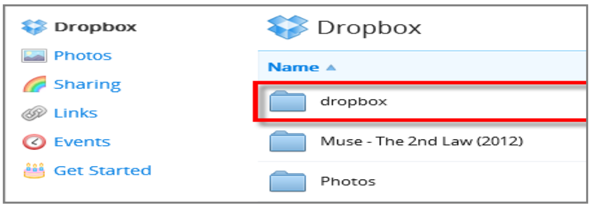


Enter your Dropbox password to link this host to your account.

Password: ●●●●●●●●●

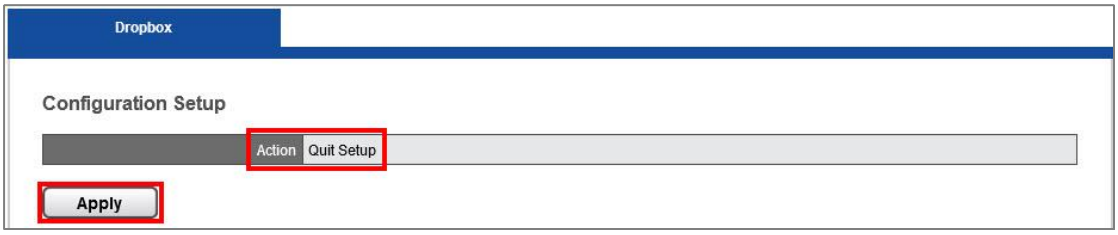
When Dropbox successfully connects to NVR, NVR will automatically create a file named “**Dropbox**.” All documents saved in your Dropbox account will start sync to Dropbox folder created in NVR.


192.168.1.16
網路 › 192.168.1.16
Windows (C:)
RECOVERY (D:)
DIGIEVER (F:)
Natasha.Wu (natash
PlayMemories Hom
網路
Dropbox
Public
VideoVolume1
3 個項目　已選取 1 個項目


Dropbox
Photos
Sharing
Links
Events
Get Started
Dropbox
Name
dropbox
Muse - The 2nd Law (2012)
Photos

- **Quit Setup**

  When NVR is accessing to Dropbox, the NVR will display as below:



Configuration Setup

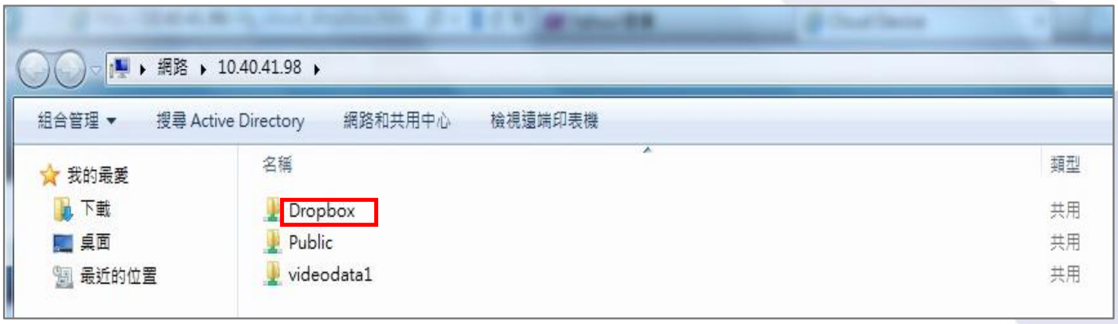
Action: Quit Setup

Dropbox
Apply

  If users want to cancel the Dropbox setting, please click “**Apply**” to remove setup.

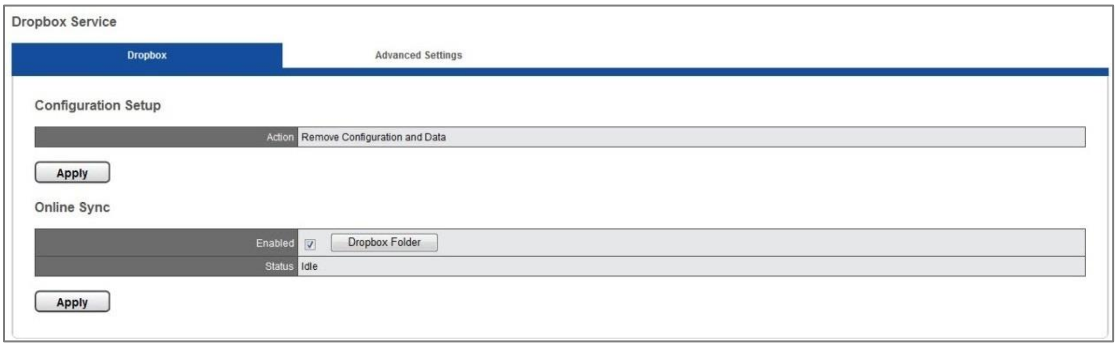
5.4.2 Share Files to Dropbox Server

Users can move the files from **Public** (snapshot, config, etc.) or **Videodata1** (continuous recording, event recording, video clip, etc.) to Dropbox folder in order to share files to the clouds.


網路 › 10.40.41.98
組合管理
搜尋 Active Directory
網路和共用中心
檢視遠端印表機
我的最愛
下載
桌面
最近的位置
名稱
類型
Dropbox
Public
videodata1
共用
共用
共用

5.4.3 Remove Configuration and Online Sync

Please press“**F5 button**” on the keyboard to refresh the webpage. You can see the webpage as below:


Dropbox Service

Configuration Setup

Action: Remove Configuration and Data

Online Sync

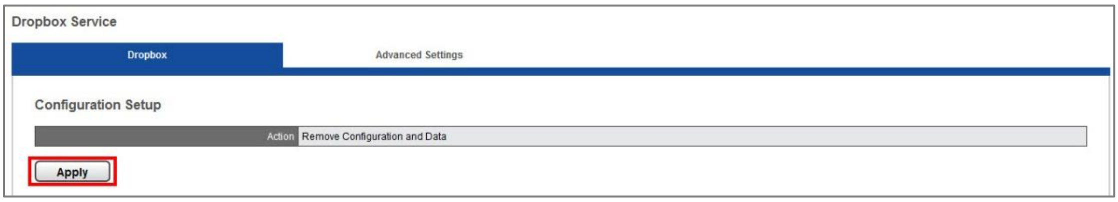
Enabled: ☑

Status: Idle

Dropbox
Advanced Settings
Apply
Dropbox Folder
Apply

1. Remove Configuration and Data

Please Click “**Apply**” to remove Dropbox service from NVR. All configuration and data of Dropbox in NVR will be deleted.


Dropbox Service

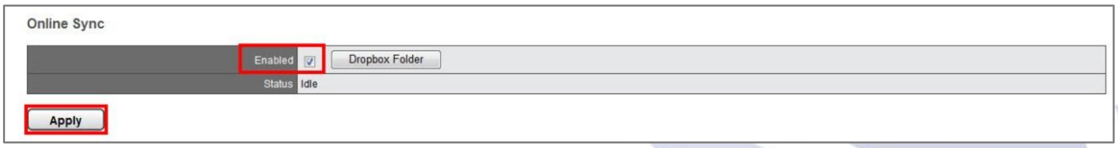
Configuration Setup

Action: Remove Configuration and Data

Dropbox
Advanced Settings
Apply

2. Online Sync

Users can choose whether NVR automatically synchronizes with Dropbox Server.
If users want to enable synchronization, please check “**Enable**” and click “**Apply**.”
If users want to disable synchronization, please uncheck “**Enable**” and click “**Apply**.”


Online Sync

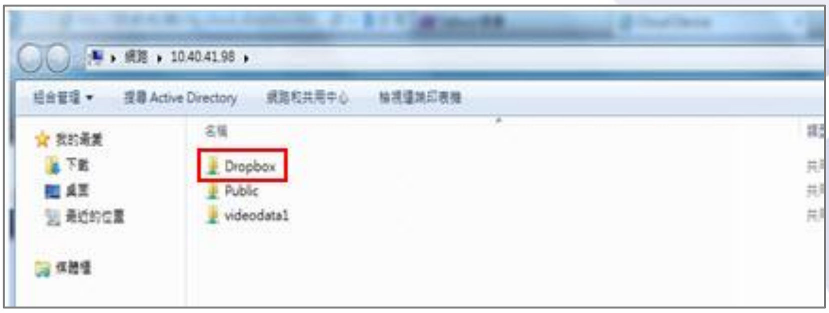
Enabled: ☑

Status: Idle

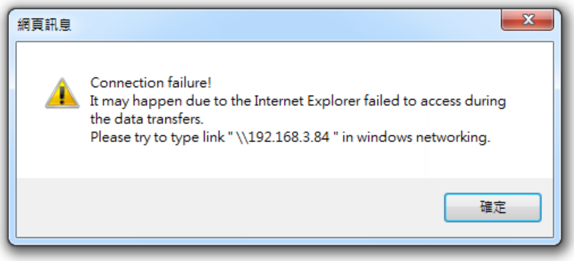
Dropbox Folder
Apply

Dropbox Folder

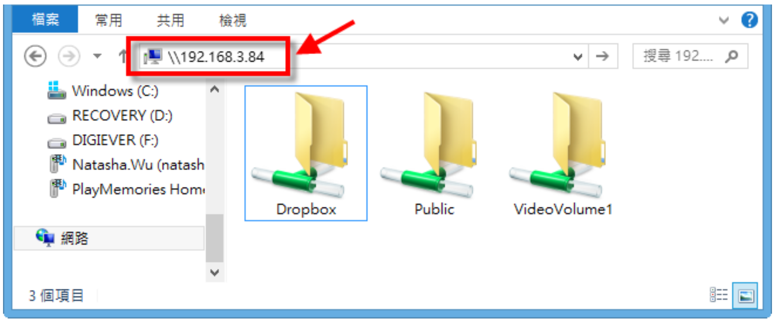
Users can click “Dropbox Folder” to open the folder directly.


網路
10.40.41.98
組合管理
搜尋 Active Directory
網路和共用中心
檢視遠端印表機
名稱
我的最愛
下載
桌面
最近的位置
媒體櫃
Dropbox
Public
videodata1

Please enter NVR's IP address in LAN if a warning window pops up as below.

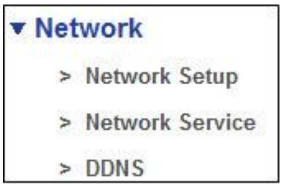


Connection failure!
It may happen due to the Internet Explorer failed to access during the data transfers.
Please try to type link " \\192.168.3.84 " in windows networking.



檔案
常用
共用
檢視
\\192.168.3.84
搜尋 192....
Windows (C:)
RECOVERY (D:)
DIGIEVER (F:)
Natasha.Wu (natash
PlayMemories Hom
網路
Dropbox
Public
VideoVolume1
3 個項目

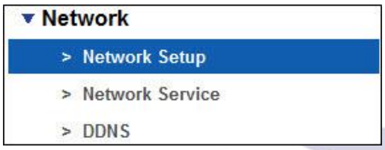
5.5 Network Setup



Network
> Network Setup
> Network Service
> DDNS

5.5.1 Network Setup

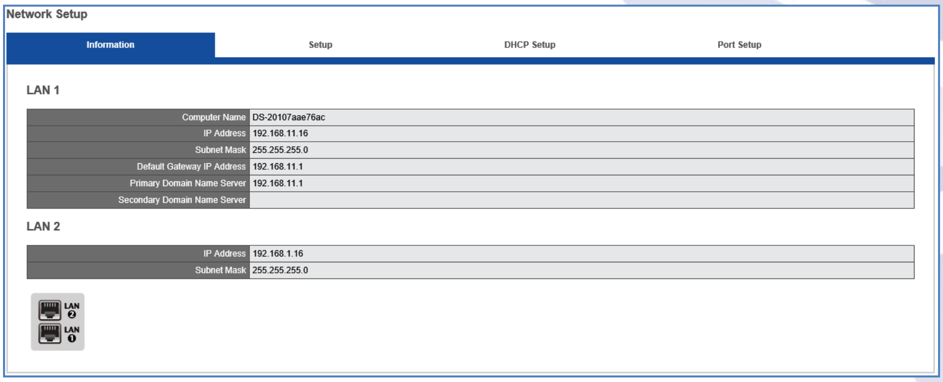
Please select "**Network Setup**" from the drop-down menu of **Network** to begin.



Network
> Network Setup
> Network Service
> DDNS

This section explains how to configure network connection with NVR.

1. **Information**



Network Setup
Information
Setup
DHCP Setup
Port Setup

LAN 1

Computer Name	DS-20107aae76ac
IP Address	192.168.11.16
Subnet Mask	255.255.255.0
Default Gateway IP Address	192.168.11.1
Primary Domain Name Server	192.168.11.1
Secondary Domain Name Server	

LAN 2

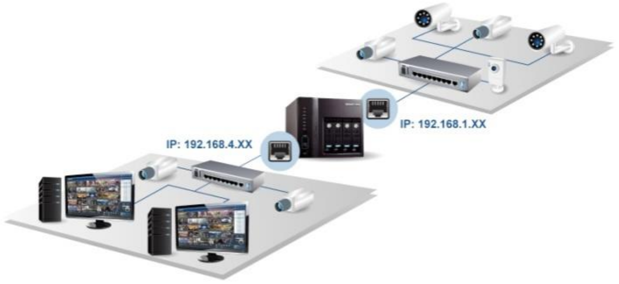
IP Address	192.168.1.16
Subnet Mask	255.255.255.0

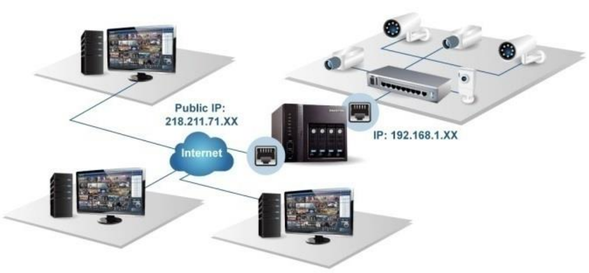
LAN 2
LAN 1

Network information displays present network configuration including: **Computer Name**, **IP address**, **Subnet mask, Default Gateway**, **Primary and Secondary DNS**.

2. Setup

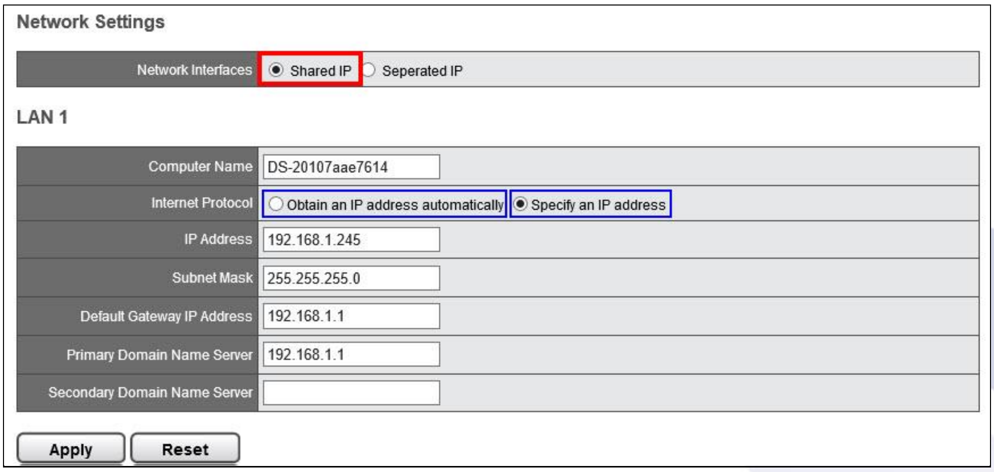
NVR supports **dual IP application** to connect different network segments to maximize network efficiency. Dual IP application allows users to efficiently communicate between internet and surveillance system. Dual IP application largely increased the resistibility of unauthorized data theft and the unavailability of accessing to cameras. In addition to high security and data protection, NVR makes the management of video surveillance much easier and more flexible.





⚠ **Note:** Dual IP application is supported in DS-8300-RM Pro+ Series, DS-4300-RM Pro+, DS-4300 Pro+, DS-8200-RM Pro+ Series, DS-4200-RM Pro+ Series, DS-4200 Pro+ Series, DS-8200-RM Pro Series, DS-4200-RM Pro Series and DS-4200 Pro Series.

(1) Shared IP



Network Settings

Network Interfaces	● Shared IP ○ Seperated IP

LAN 1

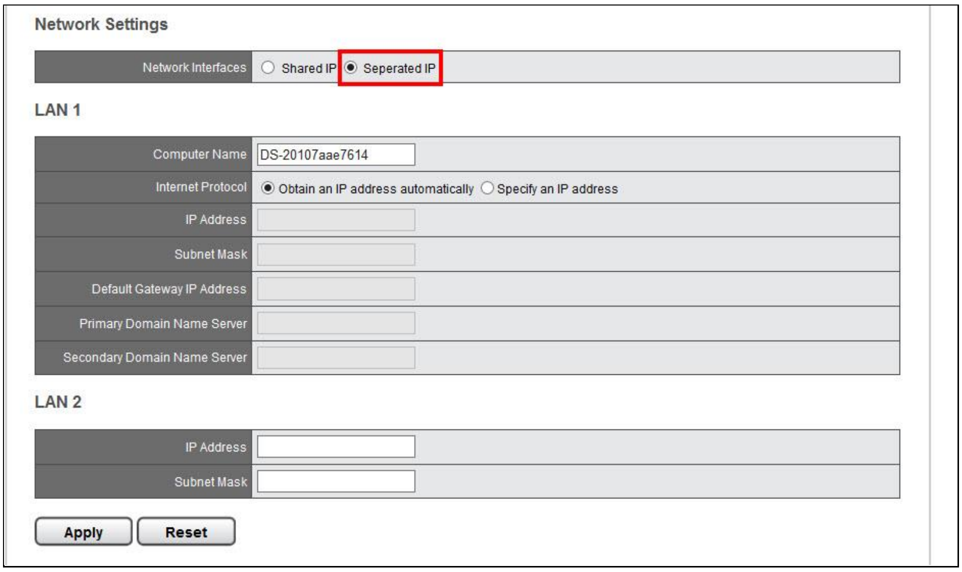
Computer Name	DS-20107aae7614
Internet Protocol	○ Obtain an IP address automatically ● Specify an IP address
IP Address	192.168.1.245
Subnet Mask	255.255.255.0
Default Gateway IP Address	192.168.1.1
Primary Domain Name Server	192.168.1.1
Secondary Domain Name Server	

Users can rename **Computer Name** and to assign **DHCP** or **Static IP**.

① **DHCP**: Obtain an available dynamic IP address assigned by a DHCP server. If this option is selected, NVR will automatically obtain an available dynamic IP address from the DHCP server when connecting to the LAN.

② **Static IP**: If no DHCP server exists in the networking environment, the IP address will be given as **192.168.1.245**. However, it's recommended to set different IP address of NVR if there is more than one NVR in the network.

(2) Separated IP



Network Settings

Network Interfaces	○ Shared IP ● Seperated IP

LAN 1

Computer Name	DS-20107aae7614
Internet Protocol	● Obtain an IP address automatically ○ Specify an IP address
IP Address	
Subnet Mask	
Default Gateway IP Address	
Primary Domain Name Server	
Secondary Domain Name Server	

LAN 2

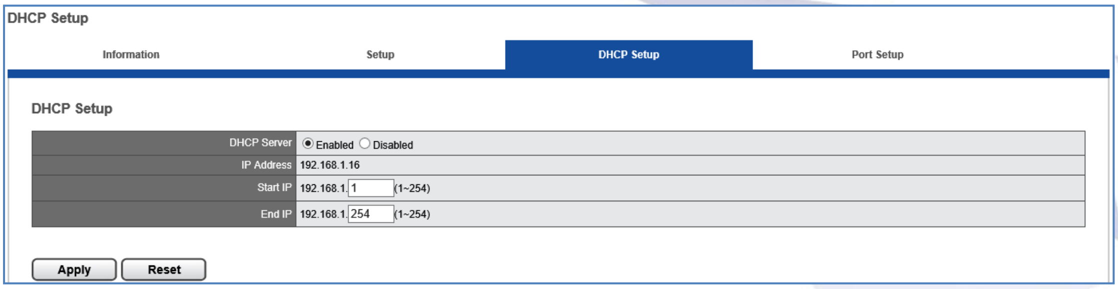
IP Address	
Subnet Mask	

Please enter two IP address to in LAN1 and LAN2 to set up different network environments. Please click “**Apply**” to execute the settings.

⚠ **Note:** Please assign **LAN1** as WAN port and set up gateway to communicate with router.

3. DHCP Setup

Built-in DHCP server allows users to easily install IP surveillance systems without connecting another router providing network parameters. With built-in DHCP server, NVR can assign local IP addresses to multiple IP cameras in a local area network (LAN).



DHCP Setup

DHCP Server	● Enabled ○ Disabled
IP Address	192.168.1.16
Start IP	192.168.1.1 (1~254)
End IP	192.168.1.254 (1~254)

⚠ **Note:** In DS-2100 Pro+, DS-1100 Pro+, DS-2100 Pro and DS-1100 Pro, built-in DHCP server is available when LAN is specified an IP address (static IP).

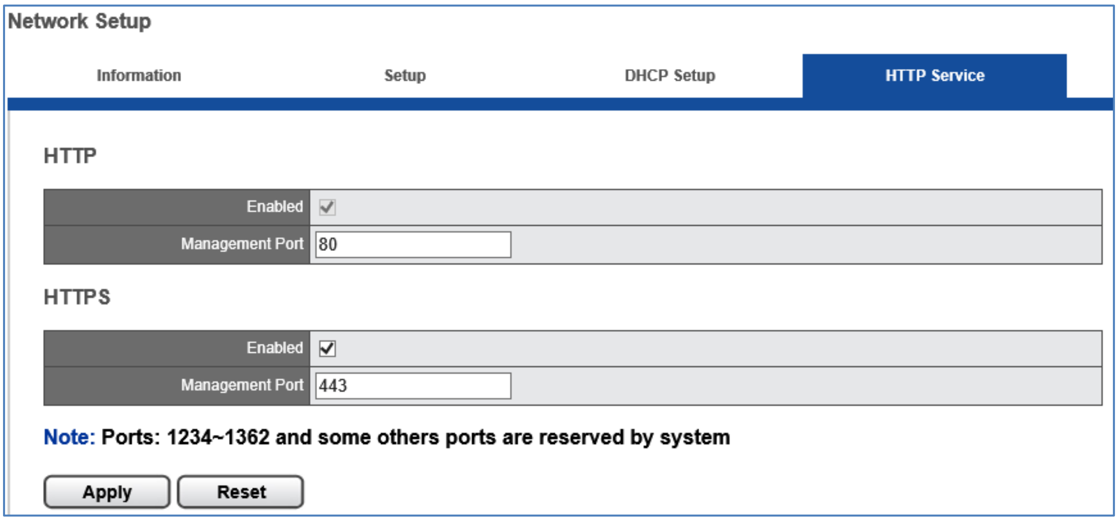
⚠ **Note:** In DS-8300-RM Pro+, DS-4300-RM Pro+, DS-4300 Pro+, DS-8200-RM Pro+, DS-4200-RM Pro+, DS-4200 Pro+, DS-8200-RM Pro+, DS-4200-RM Pro, DS-4200 Pro, DS-4000 and DS-2000 series, DHCP service will assign valid IP address via **LAN2 port**.

⚠ **Note:** Please do not connect to another device containing DHCP server function such as router when utilizing built-in DHCP server.

4. HTTP Service

Please set up transmission port to access NVR. Default port for NVR connection is **80**. Users can concurrently enable HTTP and HTTPS feature to connect NVR. For users with higher security concern, HTTPS can efficiently enhance security of network communication.

⚠ **Note. HTTP** is the default setting.


Network Setup
Information
Setup
DHCP Setup
HTTP Service
Apply
Reset

HTTP

Enabled ☑

Management Port 80

HTTPS

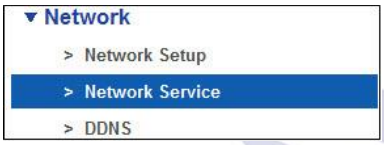
Enabled ☑

Management Port 443

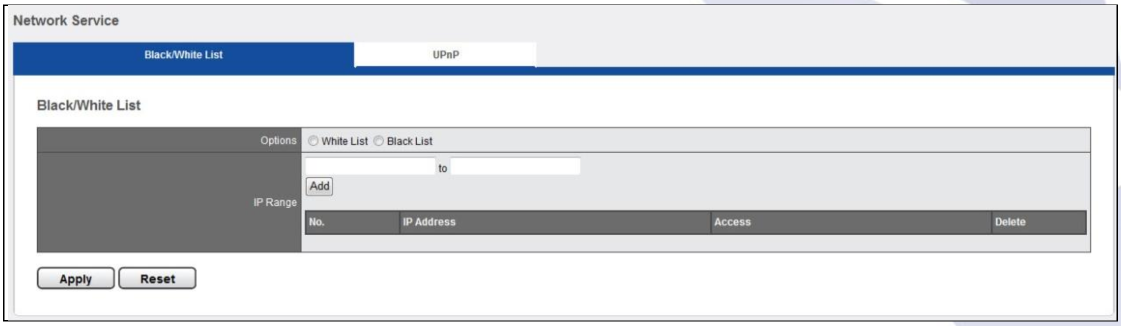
Note: Ports: 1234~1362 and some others ports are reserved by system

5.5.2 Network Service

Please select "**Network Service**" from the drop-down menu of **Network** to begin.


▼ Network
> Network Setup
> Network Service
> DDNS

1. Black/ White List

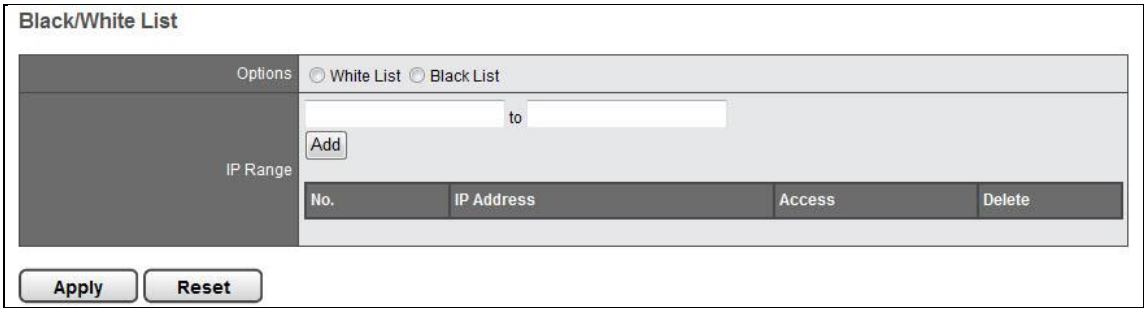

Network Service
Black/White List
UPnP
Black/White List
Add
Apply
Reset

Options ○ White List ○ Black List

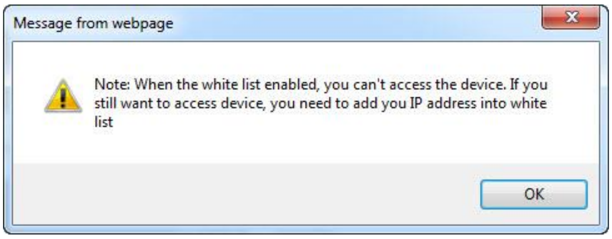
IP Range to

No.	IP Address	Access	Delete

Edit **White** or **Black List** to **allow** or **block** different IP address.

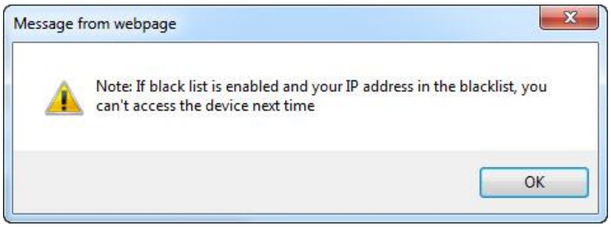

Black/White List
Options
○ White List ○ Black List
IP Range
to
Add
No.
IP Address
Access
Delete
Apply
Reset

As White List is enabled, a window will pop up to make sure the execution.


Message from webpage
OK

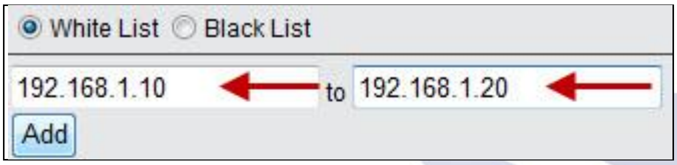
Note: When the white list enabled, you can't access the device. If you still want to access device, you need to add you IP address into white list

As Black List is enabled, a window will pop up to make sure the execution.


Message from webpage
OK

Note: If black list is enabled and your IP address in the blacklist, you can't access the device next time

Please enter the IP address range to add to White List or Black List.

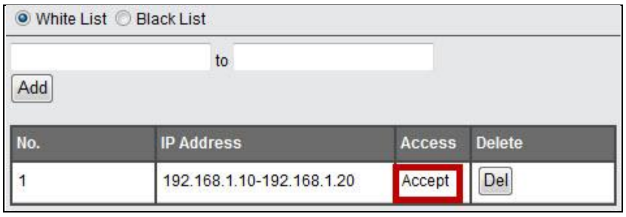


● White List ○ Black List

192.168.1.10 to 192.168.1.20

⚠ **Note**: The above IP address is only an example for reference. User is recommanded to add White List or Black List carefully according to different demand. Also, user can set either White List or Black List in the same time.

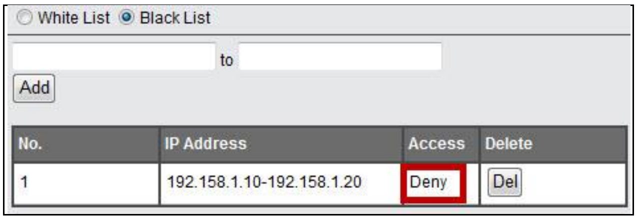
After the White List or Black List is added, the following information will display the accept access or deny access. You can also delete the list.



● White List ○ Black List

to

No.	IP Address	Access	Delete
1	192.168.1.10-192.168.1.20	Accept	Del

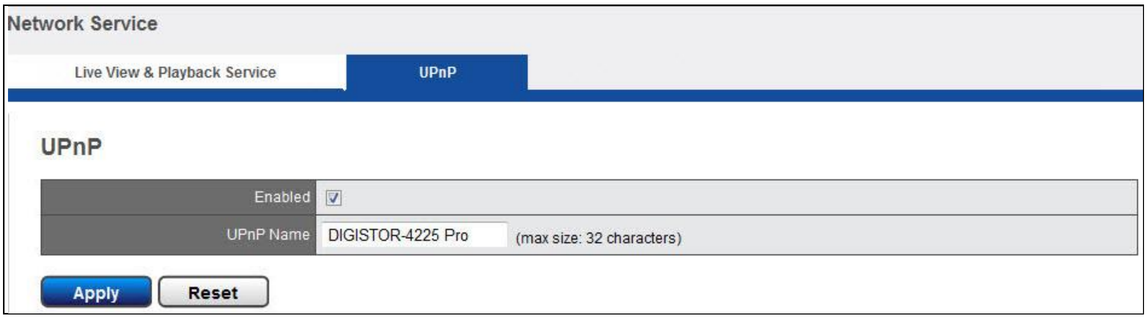


○ White List ● Black List

to

No.	IP Address	Access	Delete
1	192.158.1.10-192.158.1.20	Deny	Del

2. UPnP



Network Service

Live View & Playback Service
UPnP

UPnP

Enabled	☑
UPnP Name	DIGISTOR-4225 Pro (max size: 32 characters)

Apply
Reset

Enable or disable **UPnP** search.

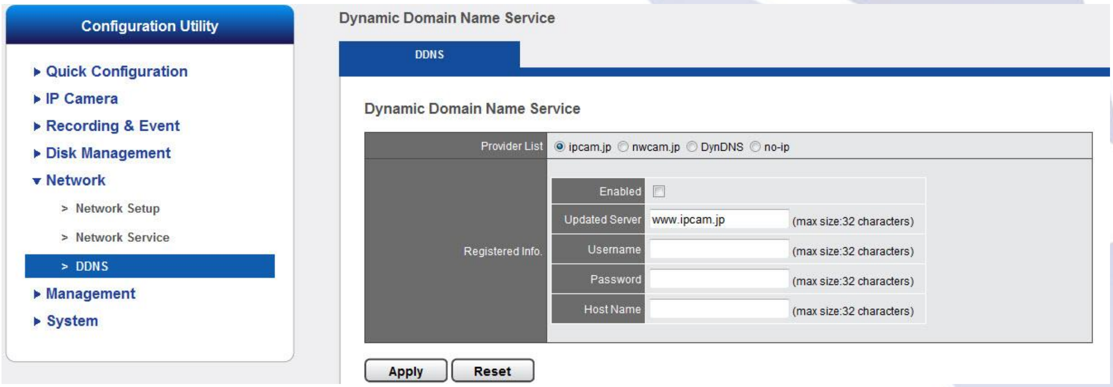
Rename **UPnP**.

⚠**Note**:The maximum character limitation for UPnP Name is **32** characters.

Please click “**Apply**” to execute the settings.

5.5.3 DDNS

Please select “**DDNS**” from the drop-down menu of **Network** to begin.



Configuration Utility
Quick Configuration
IP Camera
Recording & Event
Disk Management
Network
> Network Setup
> Network Service
> DDNS
Management
System

Dynamic Domain Name Service

DDNS

Dynamic Domain Name Service

Provider List ● ipcam.jp ○ nwcam.jp ○ DynDNS ○ no-ip

Registered Info.

Enabled	☐	
Updated Server	www.ipcam.jp	(max size:32 characters)
Username		(max size:32 characters)
Password		(max size:32 characters)
Host Name		(max size:32 characters)

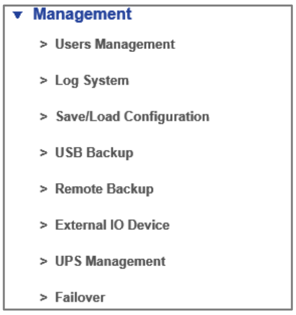
Apply
Reset

DDNS links a domain name to an IP address, allowing users to easily access their camera even with a changing IP address. NVR is compatible with four DDNS service providers (1) ipcam.jp (2) mwcam.jp (3)DynDNS, and (4) No-IP.

⚠**Note:** Before utilizing this function,please apply for a dynamic domain account from a DDNS provider.

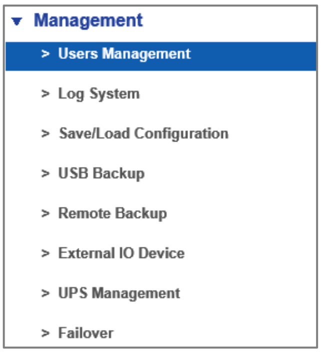
5.6 Management

In Management, users can easily create, modify and change users' live view access and playback access. Also, users can read various log information through log system and quickly save or load configuration of NVR. Emergent backup of the latest video files as well as the external input and output control can also be set here.


▼ Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover

5.6.1 User Management

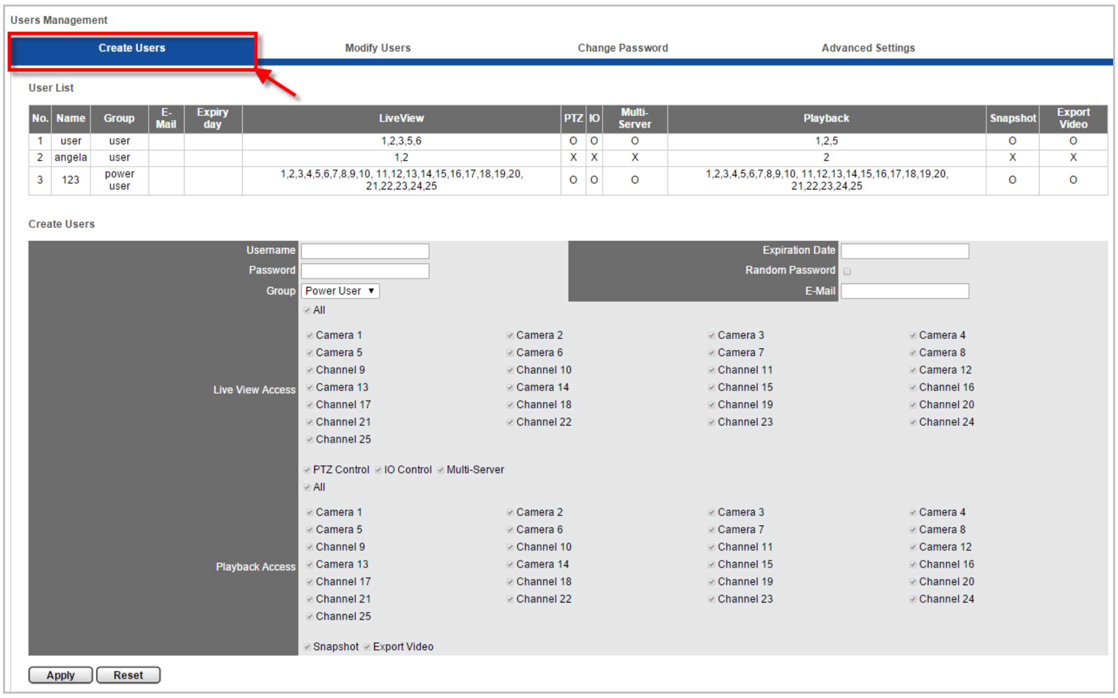
Select “**User Management**” from the drop-down menu of **Management** to begin.


▼ Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover

NVR can be accessed by multiple users simultaneously. Except the built-in Administrator account (user name "**admin**" and password "**admin**"). Administrator can create other Power User and User accounts. Administrator possesses the highest privilege, compare to Power User and User. And Power User and User can be given different privilege of live view and playback of different channels.

1. Create Users

User List will display all user information when creating new users. To create users, please go to **Create Users** to create user in advance.



User List

No.	Name	Group	E-Mail	Expiry day	LiveView	PTZ	IO	Multi-Server	Playback	Snapshot	Export Video
1	user	user			1,2,3,5,6	O	O	O	1,2,5	O	O
2	angela	user			1,2	X	X	X	2	X	X
3	123	power user			1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25	O	O	O	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25	O	O

Create Users

Username
Password
Group: Power User ▼
Expiration Date
Random Password ☐
E-Mail

Live View Access
☑ All

☑ Camera 1	☑ Camera 2	☑ Camera 3	☑ Camera 4
☑ Camera 5	☑ Camera 6	☑ Camera 7	☑ Camera 8
☑ Channel 9	☑ Channel 10	☑ Channel 11	☑ Camera 12
☑ Camera 13	☑ Camera 14	☑ Channel 15	☑ Channel 16
☑ Channel 17	☑ Channel 18	☑ Channel 19	☑ Channel 20
☑ Channel 21	☑ Channel 22	☑ Channel 23	☑ Channel 24
☑ Channel 25			

☑ PTZ Control ☑ IO Control ☑ Multi-Server

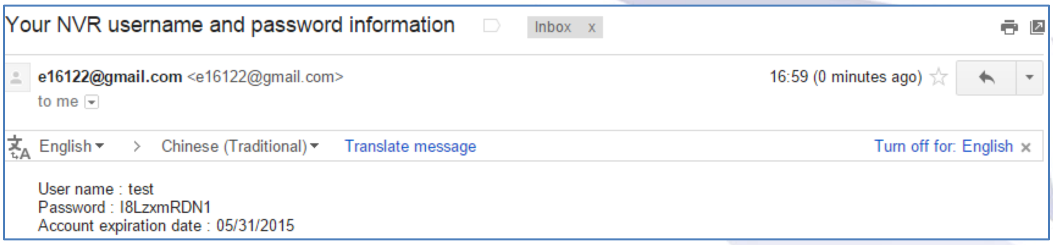
Playback Access
☑ All

☑ Camera 1	☑ Camera 2	☑ Camera 3	☑ Camera 4
☑ Camera 5	☑ Camera 6	☑ Camera 7	☑ Camera 8
☑ Channel 9	☑ Channel 10	☑ Channel 11	☑ Camera 12
☑ Camera 13	☑ Camera 14	☑ Channel 15	☑ Channel 16
☑ Channel 17	☑ Channel 18	☑ Channel 19	☑ Channel 20
☑ Channel 21	☑ Channel 22	☑ Channel 23	☑ Channel 24
☑ Channel 25			

☑ Snapshot ☑ Export Video

(1) Username and Password: Fill in a username and password (or click **random password**). Please fill in Email address to send the password when clicking random password.

(2) Account expiration (Optional): Assign a specific date to control the valid time of user accounts in order to avoid the possibility of forgetting to close the account. Based on NVR time zone, once the expiration date is coming, original password becomes invalid to be accessed. User account information will remain in NVR system for tracking.



Your NVR username and password information

e16122@gmail.com <e16122@gmail.com>

16:59 (0 minutes ago)

User name : test
Password : I8LzxmRDN1
Account expiration date : 05/31/2015

⚠ **Note:** The expiration date is the last day that user account can log in to the NVR. For example, if account expiration date is 05/31/2015, user can log in NVR until 05/31/2015 23:59:59.

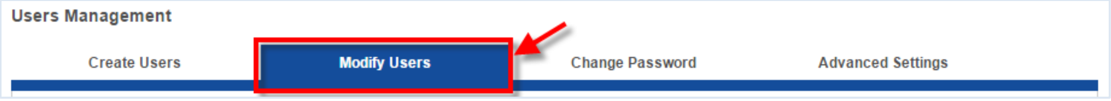
(3) Group: select a group from **power user/ user**.

(4) Liveview and playback access: select liveview /playback channel and other functions (ex. PTZ control, multi-server) to be accessed

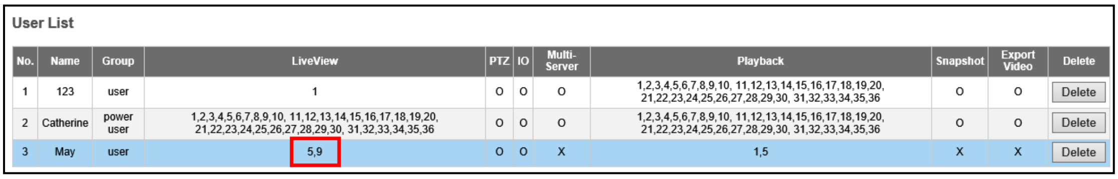
Finally, click "**Apply**" to add new user account.

2. Modify Users

Please go to Modify User page.



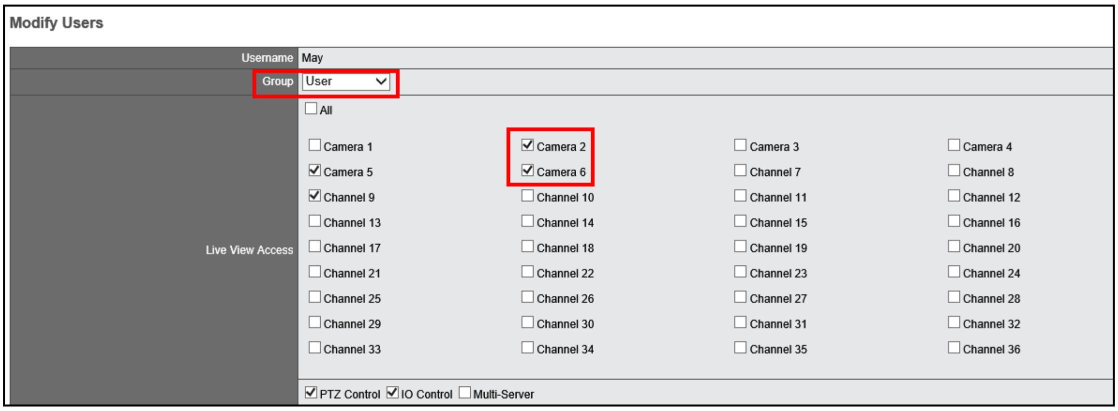
Select an account to modify the Power User or User.



User List

No.	Name	Group	LiveView	PTZ	IO	Multi-Server	Playback	Snapshot	Export Video	Delete
1	123	user	1	O	O	O	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	Delete
2	Catherine	power user	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	O	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	Delete
3	May	user	5,9	O	O	X	1,5	X	X	Delete

The selected account will turn to blue and the page for modifying user will appear as below. You can change Live View Access and Playback Access. Please click “**Apply**” to proceed.



Modify Users

Username: May

Group: User

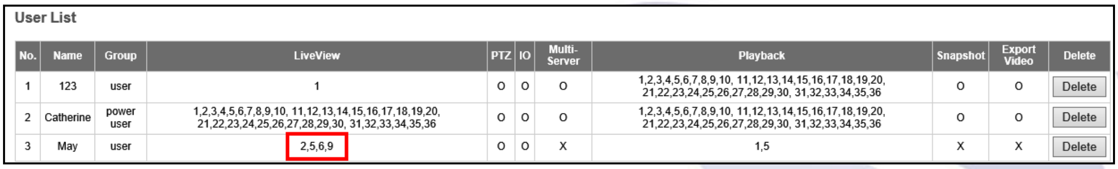
Live View Access:

☐ All

☐ Camera 1	☑ Camera 2	☐ Camera 3	☐ Camera 4
☑ Camera 5	☑ Camera 6	☐ Channel 7	☐ Channel 8
☑ Channel 9	☐ Channel 10	☐ Channel 11	☐ Channel 12
☐ Channel 13	☐ Channel 14	☐ Channel 15	☐ Channel 16
☐ Channel 17	☐ Channel 18	☐ Channel 19	☐ Channel 20
☐ Channel 21	☐ Channel 22	☐ Channel 23	☐ Channel 24
☐ Channel 25	☐ Channel 26	☐ Channel 27	☐ Channel 28
☐ Channel 29	☐ Channel 30	☐ Channel 31	☐ Channel 32
☐ Channel 33	☐ Channel 34	☐ Channel 35	☐ Channel 36

☑ PTZ Control ☑ IO Control ☐ Multi-Server

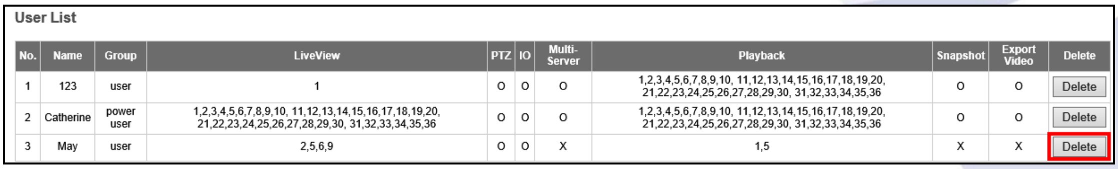
After User is modified, user list will display the renewed information.



User List

No.	Name	Group	LiveView	PTZ	IO	Multi-Server	Playback	Snapshot	Export Video	Delete
1	123	user	1	O	O	O	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	Delete
2	Catherine	power user	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	O	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	Delete
3	May	user	2,5,6,9	O	O	X	1,5	X	X	Delete

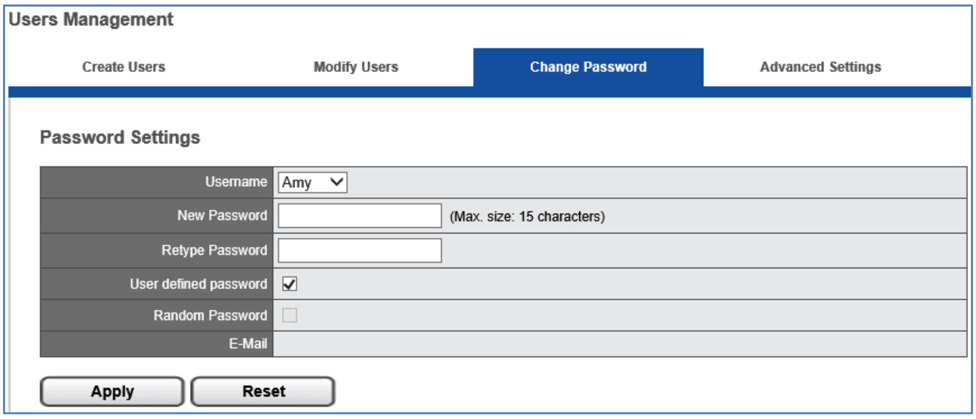
To delete the user account, please click “**Delete**” from User List in Modify Users page.



User List

No.	Name	Group	LiveView	PTZ	IO	Multi-Server	Playback	Snapshot	Export Video	Delete
1	123	user	1	O	O	O	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	Delete
2	Catherine	power user	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	O	1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30, 31,32,33,34,35,36	O	O	Delete
3	May	user	2,5,6,9	O	O	X	1,5	X	X	Delete

3. Change Password


Users Management
Create Users
Modify Users
Change Password
Advanced Settings
Apply
Reset

Password Settings

Username	Amy
New Password	(Max. size: 15 characters)
Retype Password	
User defined password	☑
Random Password	☐
E-Mail	

Each NVR comes with a built-in “**admin**” account with password “**admin**” for administrators. It’s highly recommended to change the password upon the initial login.

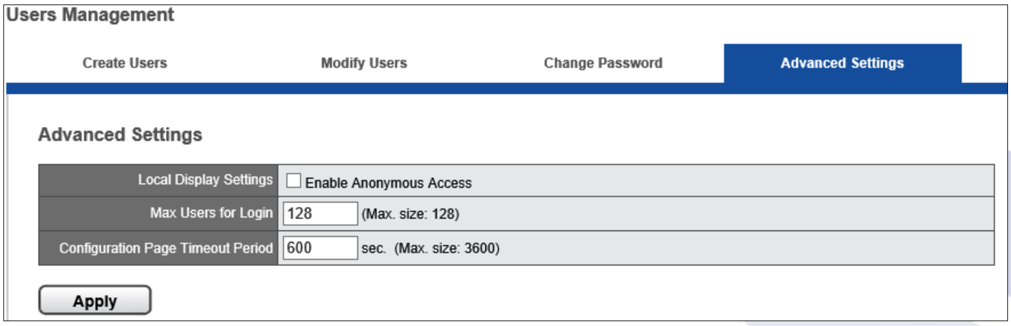
To change password, please select an account from “**Username**” drop-down list to change password. Enter a new password in the “**New Password**” and enter it again in “**Retype Password**.” Finally, click “**Apply**,” the password will be changed.

Option setting:

(1) **User-defined Password:** administrator can define whether power users and users can redefine their password for higher security concerns.

(2) **Random Password**: allows you to send a new password via email address.

4. Advanced Settings


Users Management
Create Users
Modify Users
Change Password
Advanced Settings
Apply

Advanced Settings

Local Display Settings	☐ Enable Anonymous Access
Max Users for Login	128 (Max. size: 128)
Configuration Page Timeout Period	600 sec. (Max. size: 3600)

In this page, users can set up **anonymous access on local display**, **maximum users for remote login** and **configuration page timeout period**.

(1) **Anonymous access on local display**

Anonymous user can only view live monitoring and playback page on local monitor with no access of NVR configuration. Users can enable or disable this function in this page. For more information of anonymous login, please refer to **3.1.1 Anonymous login**.

(2) Maximum users for remote login (on remote configuration page)

Users can set up the maximum number of users to log in NVR on remote site at the same time.

⚠ **Note:** The access from other remote browsers and CMS system will be counted as a user.

(3) Configuration page timeout period (on remote configuration page)

NVR allows users to freely set up the idle time to automatically log out NVR. Default is 600 seconds.

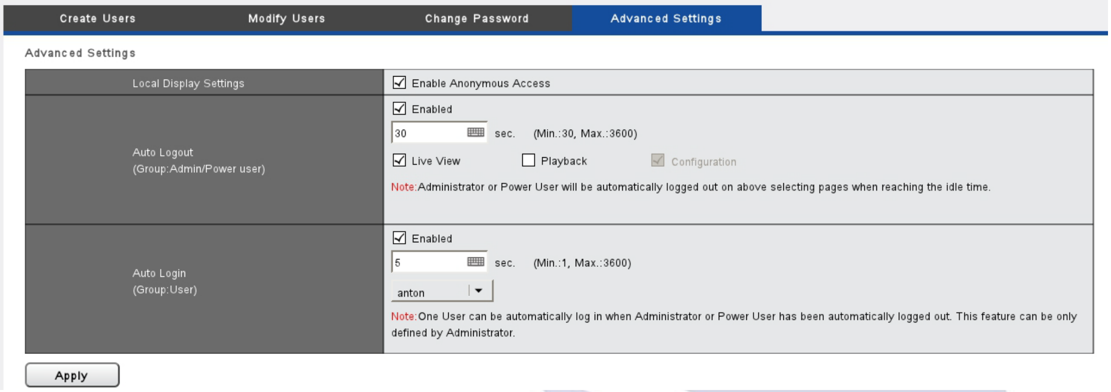
(4) Auto logout and login (on local display configuration page)

Auto logout and login feature is an advanced firewall to prevent outsiders getting confidential videos and manipulating NVR settings.

Auto logout is especially designed for **administrator** and **power user** who may carelessly forget to logout NVR.

Auto login will automatically log in by a non-admin nor power user.

⚠ **Note:** Please create a user account first.



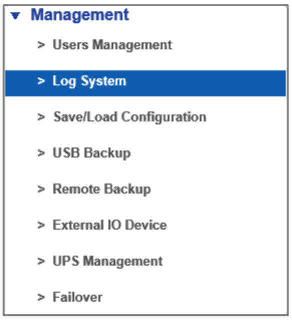
Advanced Settings

Local Display Settings	☑ Enable Anonymous Access
Auto Logout (Group:Admin/Power user)	☑ Enabled 30 sec. (Min.:30, Max.:3600) ☑ Live View ☐ Playback ☑ Configuration Note:Administrator or Power User will be automatically logged out on above selecting pages when reaching the idle time.
Auto Login (Group:User)	☑ Enabled 5 sec. (Min.:1, Max.:3600) anton Note:One User can be automatically log in when Administrator or Power User has been automatically logged out. This feature can be only defined by Administrator.

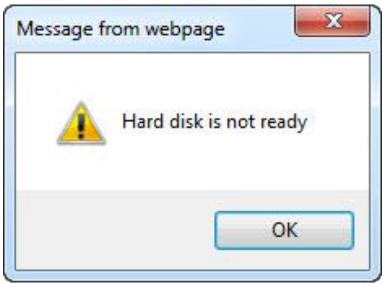
Please **enable** auto logout feature, set **on which page(s)** and **idle time period** to active auto logout. **Enable** auto login feature, set **time period** to active auto login after NVR log out to login page. Then, please click “**Apply**” button.

5.6.2 Log System

Please select “**Log System**” from the drop-down menu of **Management** to begin.


▼ Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover

If the hard disk is not installed, the following window will pop up when you click “**Log System**.”


Message from webpage

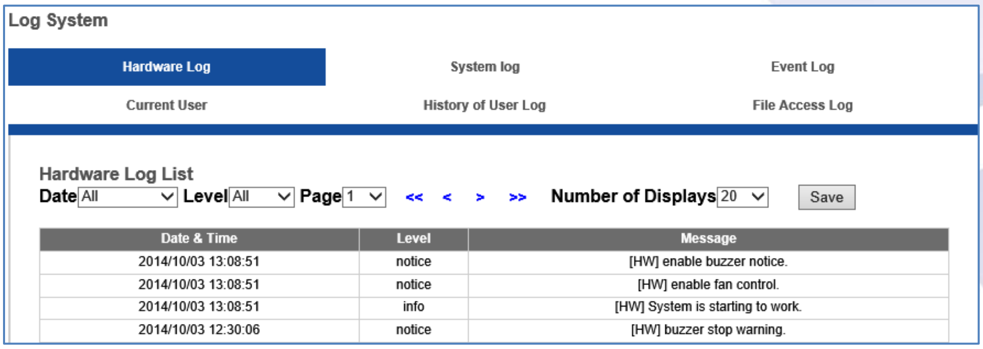
Hard disk is not ready

After the hard disk is ready, Log system starts to record the events of the NVR and to provide basic information for troubleshooting. Six types of log record are offered to check: **Hardware Log**, **System Log**, **Event Log**, **Current User**, **Historical User Log**, **and File Access Log**.

⚠ **Note:** The maximum record of each log is **10,000 records**. In other words, NVR offers six types of log record and the sum of all logs is 60,000 records. If a log reaches to 10,000 records, the oldest log will be overwritten by the latest log.

1. Hardware Log

The log information in Hardware Log includes **RAID creation**, **RAID deletion**, **RAID modification**, **CPU, buzzer, fan**, **system**, **sensor** and **USB.**


Log System
Hardware Log
System log
Event Log
Current User
History of User Log
File Access Log
<< < > >>
Save

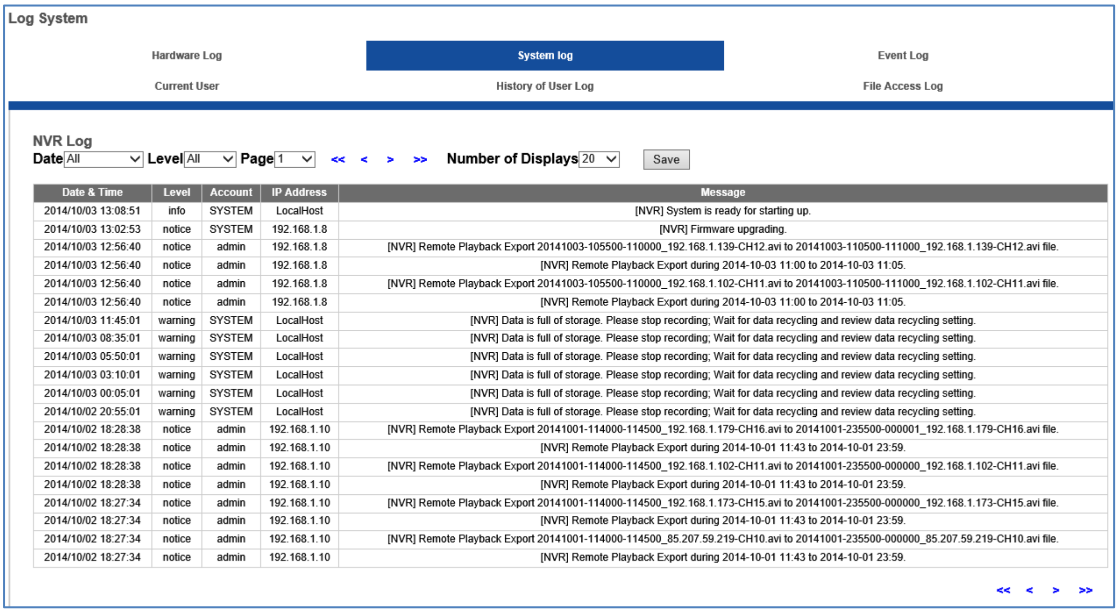
Hardware Log List

Date All Level All Page 1 Number of Displays 20

Date & Time	Level	Message
2014/10/03 13:08:51	notice	[HW] enable buzzer notice.
2014/10/03 13:08:51	notice	[HW] enable fan control.
2014/10/03 13:08:51	info	[HW] System is starting to work.
2014/10/03 12:30:06	notice	[HW] buzzer stop warning.

2. System Log

The log information in NVR Log includes **time zone**, **daylight**, **system, firmware upgrading, configuration IP**, **recording files export** and **storage**.



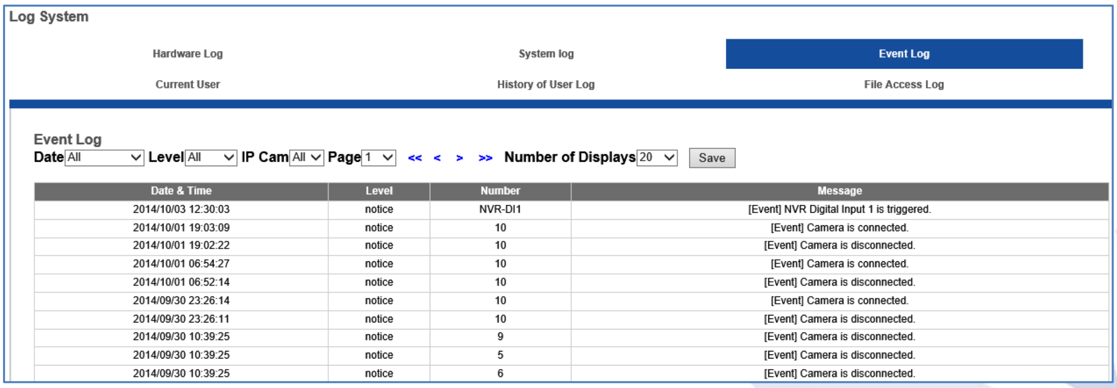
NVR Log

Date: All | Level: All | Page: 1 | Number of Displays: 20

Date & Time	Level	Account	IP Address	Message
2014/10/03 13:08:51	info	SYSTEM	LocalHost	[NVR] System is ready for starting up.
2014/10/03 13:02:53	notice	SYSTEM	192.168.1.8	[NVR] Firmware upgrading.
2014/10/03 12:56:40	notice	admin	192.168.1.8	[NVR] Remote Playback Export 20141003-105500-110000_192.168.1.139-CH12.avi to 20141003-110500-111000_192.168.1.139-CH12.avi file.
2014/10/03 12:56:40	notice	admin	192.168.1.8	[NVR] Remote Playback Export during 2014-10-03 11:00 to 2014-10-03 11:05.
2014/10/03 12:56:40	notice	admin	192.168.1.8	[NVR] Remote Playback Export 20141003-105500-110000_192.168.1.102-CH11.avi to 20141003-110500-111000_192.168.1.102-CH11.avi file.
2014/10/03 12:56:40	notice	admin	192.168.1.8	[NVR] Remote Playback Export during 2014-10-03 11:00 to 2014-10-03 11:05.
2014/10/03 11:45:01	warning	SYSTEM	LocalHost	[NVR] Data is full of storage. Please stop recording; Wait for data recycling and review data recycling setting.
2014/10/03 08:35:01	warning	SYSTEM	LocalHost	[NVR] Data is full of storage. Please stop recording; Wait for data recycling and review data recycling setting.
2014/10/03 05:50:01	warning	SYSTEM	LocalHost	[NVR] Data is full of storage. Please stop recording; Wait for data recycling and review data recycling setting.
2014/10/03 03:10:01	warning	SYSTEM	LocalHost	[NVR] Data is full of storage. Please stop recording; Wait for data recycling and review data recycling setting.
2014/10/03 00:05:01	warning	SYSTEM	LocalHost	[NVR] Data is full of storage. Please stop recording; Wait for data recycling and review data recycling setting.
2014/10/02 20:55:01	warning	SYSTEM	LocalHost	[NVR] Data is full of storage. Please stop recording; Wait for data recycling and review data recycling setting.
2014/10/02 18:28:38	notice	admin	192.168.1.10	[NVR] Remote Playback Export 20141001-114000-114500_192.168.1.179-CH16.avi to 20141001-235500-000001_192.168.1.179-CH16.avi file.
2014/10/02 18:28:38	notice	admin	192.168.1.10	[NVR] Remote Playback Export during 2014-10-01 11:43 to 2014-10-01 23:59.
2014/10/02 18:28:38	notice	admin	192.168.1.10	[NVR] Remote Playback Export 20141001-114000-114500_192.168.1.102-CH11.avi to 20141001-235500-000000_192.168.1.102-CH11.avi file.
2014/10/02 18:28:38	notice	admin	192.168.1.10	[NVR] Remote Playback Export during 2014-10-01 11:43 to 2014-10-01 23:59.
2014/10/02 18:27:34	notice	admin	192.168.1.10	[NVR] Remote Playback Export 20141001-114000-114500_192.168.1.173-CH15.avi to 20141001-235500-000000_192.168.1.173-CH15.avi file.
2014/10/02 18:27:34	notice	admin	192.168.1.10	[NVR] Remote Playback Export during 2014-10-01 11:43 to 2014-10-01 23:59.
2014/10/02 18:27:34	notice	admin	192.168.1.10	[NVR] Remote Playback Export 20141001-114000-114500_85.207.59.219-CH10.avi to 20141001-235500-000000_85.207.59.219-CH10.avi file.
2014/10/02 18:27:34	notice	admin	192.168.1.10	[NVR] Remote Playback Export during 2014-10-01 11:43 to 2014-10-01 23:59.

3. Event Log

The log information in Event Log includes "**Camera is connected**," "**The camera is disconnected**," "**Digital Input**," "**Motion detected**" and "**Storage usage is out of limit,**" etc.



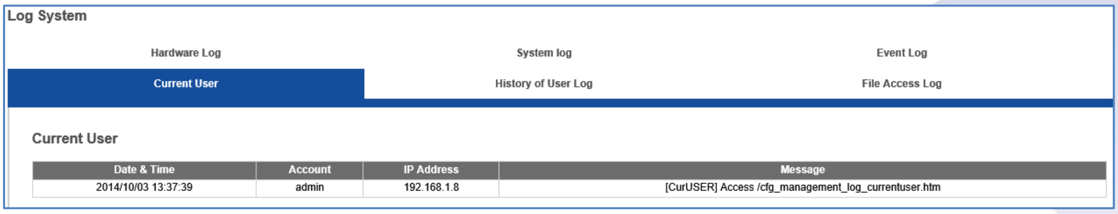
Event Log

Date: All | Level: All | IP Cam: All | Page: 1 | Number of Displays: 20

Date & Time	Level	Number	Message
2014/10/03 12:30:03	notice	NVR-DI1	[Event] NVR Digital Input 1 is triggered.
2014/10/01 19:03:09	notice	10	[Event] Camera is connected.
2014/10/01 19:02:22	notice	10	[Event] Camera is disconnected.
2014/10/01 06:54:27	notice	10	[Event] Camera is connected.
2014/10/01 06:52:14	notice	10	[Event] Camera is disconnected.
2014/09/30 23:26:14	notice	10	[Event] Camera is connected.
2014/09/30 23:26:11	notice	10	[Event] Camera is disconnected.
2014/09/30 10:39:25	notice	9	[Event] Camera is disconnected.
2014/09/30 10:39:25	notice	5	[Event] Camera is disconnected.
2014/09/30 10:39:25	notice	6	[Event] Camera is disconnected.

4. Current User

The log information in Current User shows the current users logged in the NVR with IP address.

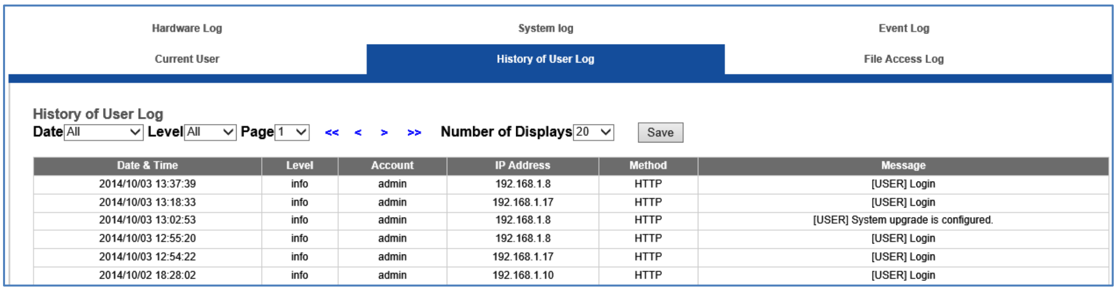


Current User

Date & Time	Account	IP Address	Message
2014/10/03 13:37:39	admin	192.168.1.8	[CurUSER] Access /cfg_management_log_currentuser.htm

5. Historical User Log

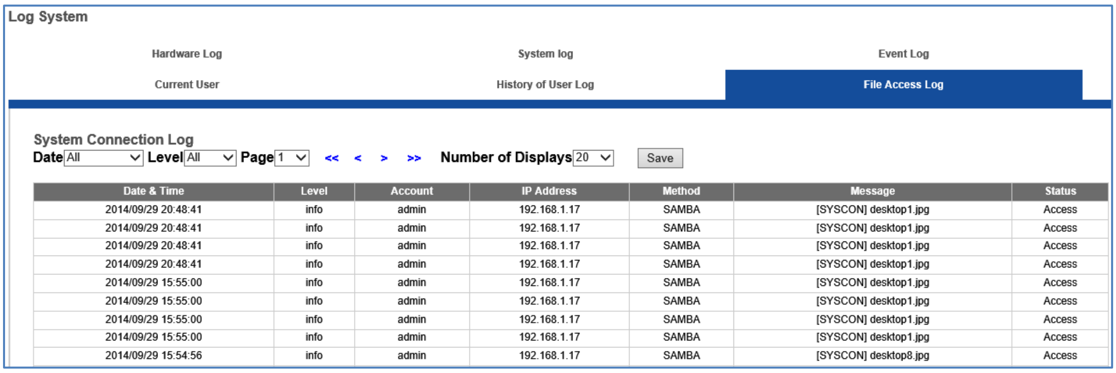
The log information in Historical User Log records any user who has logged in the NVR. For example, “**Execute detect**,” “**Motion detected**,” “**FTP service is configured**,” “**Account is created**,” “**Execute system shutdown**,” etc.


Hardware Log
System log
Event Log
Current User
History of User Log
File Access Log
History of User Log
Date All
Level All
Page 1
<<
<
>
>>
Number of Displays 20
Save

Date & Time	Level	Account	IP Address	Method	Message
2014/10/03 13:37:39	info	admin	192.168.1.8	HTTP	[USER] Login
2014/10/03 13:18:33	info	admin	192.168.1.17	HTTP	[USER] Login
2014/10/03 13:02:53	info	admin	192.168.1.8	HTTP	[USER] System upgrade is configured.
2014/10/03 12:55:20	info	admin	192.168.1.8	HTTP	[USER] Login
2014/10/03 12:54:22	info	admin	192.168.1.17	HTTP	[USER] Login
2014/10/02 18:28:02	info	admin	192.168.1.10	HTTP	[USER] Login

6. File Access Log

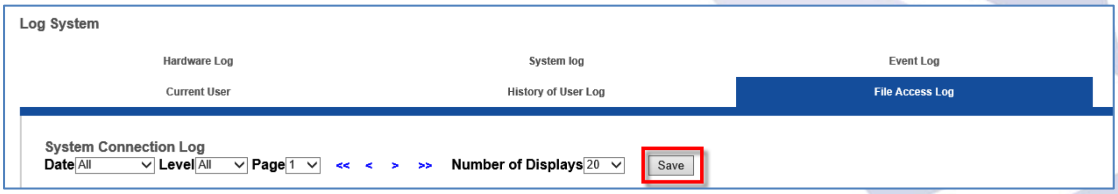
The message occurred is related to other method to get in NVR such as SAMBA or FTP.


Log System
Hardware Log
System log
Event Log
Current User
History of User Log
File Access Log
System Connection Log
Date All
Level All
Page 1
<<
<
>
>>
Number of Displays 20
Save

Date & Time	Level	Account	IP Address	Method	Message	Status
2014/09/29 20:48:41	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 20:48:41	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 20:48:41	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 20:48:41	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 15:55:00	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 15:55:00	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 15:55:00	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 15:55:00	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop1.jpg	Access
2014/09/29 15:54:56	info	admin	192.168.1.17	SAMBA	[SYSCON] desktop8.jpg	Access

Export the log files

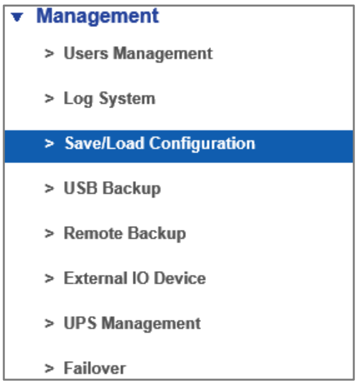
Users can export and save log files from Log System page by clicking “**Save**” button. Each log types correspond to one log file. The log content can be saved as html or txt format.


Log System
Hardware Log
System log
Event Log
Current User
History of User Log
File Access Log
System Connection Log
Date All
Level All
Page 1
<<
<
>
>>
Number of Displays 20
Save

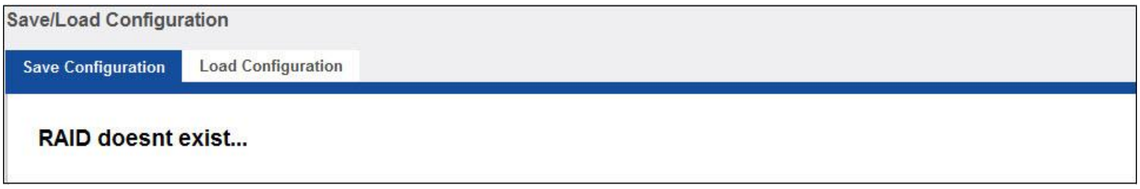
5.6.3 Save/Load Configuration

Configuration Backup enables you to accelerate NVR deployment as well as to respond quickly to hardware failures and disasters. User can save NVR configuration file to **NVR HDD**, **external USB device (via local site)** and **computer (via remote PC access)**.

Please select “**Save/Load Configuration**” from the drop-down menu of **Management** to begin.

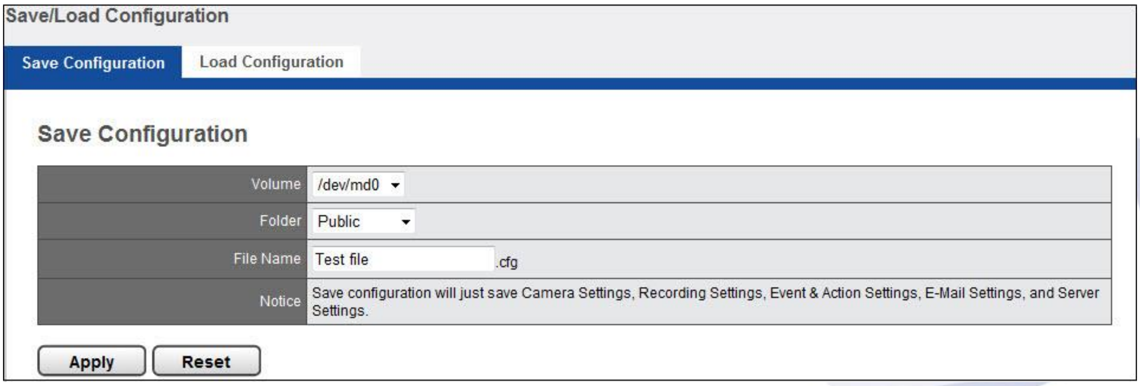

Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover

If the raid disk is not built, the following window will pop up.


Save/Load Configuration
Save Configuration
Load Configuration

RAID doesnt exist...

1. Save Configuration


Save/Load Configuration
Save Configuration
Load Configuration
Apply
Reset

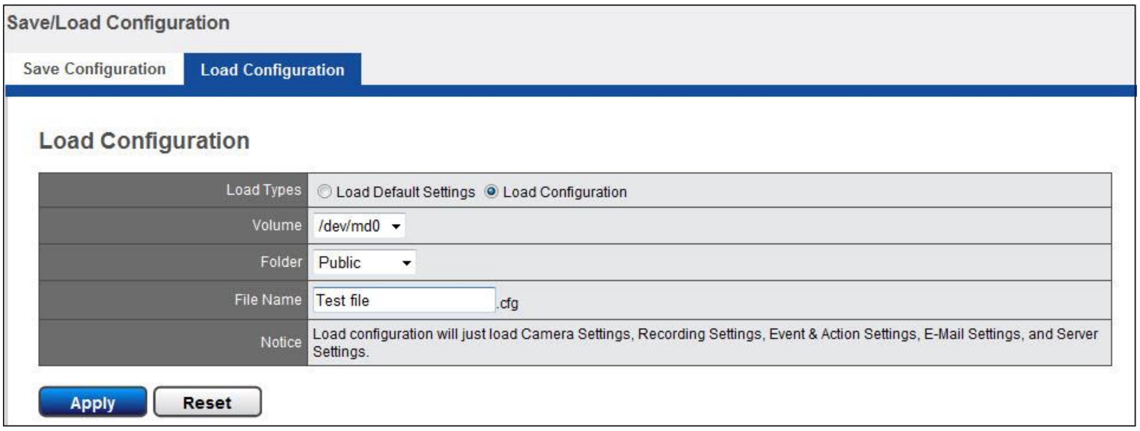
Save Configuration

Volume	/dev/md0
Folder	Public
File Name	Test file .cfg
Notice	Save configuration will just save Camera Settings, Recording Settings, Event & Action Settings, E-Mail Settings, and Server Settings.

Select **Volume (NVR folder, Local USB device or PC folder)** and **Folder** to save configuration in a format of cfg file and specify the **File Name**.

- ⚠ **Note**: Save configuration will just **save Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail settings**, and **Server Settings**.
- ⚠ **Note:** If the configuration file is saved in NVR (Public folder), you can access it from Windows Networking or FTP service.

2. Load Configuration



Load Configuration

Load Types	○ Load Default Settings ● Load Configuration
Volume	/dev/md0
Folder	Public
File Name	Test file .cfg
Notice	Load configuration will just load Camera Settings, Recording Settings, Event & Action Settings, E-Mail Settings, and Server Settings.

Load configuration can help users duplicate the same settings from one NVR to another without configuring system manually. Users can select Load Type as “**Load Default Settings**” or “**Load Configuration**.”

Once you select “**Load Default Settings**” and click “**Apply,**” configuration of **Camera Setting**, **Recording Settings**, **Event & Action Setting**, **E-Mail settings**, and **Server Settings** will reset to default.

When you select “**Load Configuration,**” please select Volume (**NVR folder, Local USB device or PC folder**) and browse the folder to find the saved configuration. Once file name displayed, click “**Apply**” to load configuration.

5.6.4 USB Backup

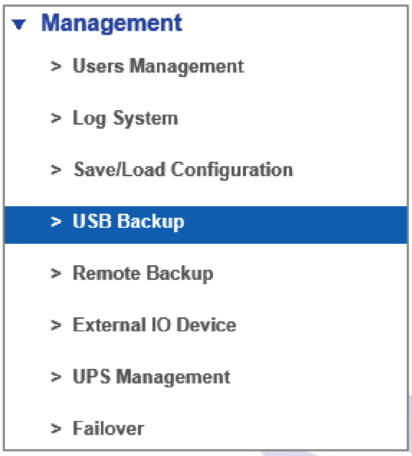
Users can preset the latest duration and channels of USB Backup button on Remote Web Browser for quick backup the latest video files locally in the future. With USB Backup button setting, when users inserts **USB device** or **USB type DVD burner** into the USB port in the NVR (front panel backup area) and press “**USB BACKUP**” for 3 seconds, NVR will execute USB backup and the latest video files will be duplicated. During the backup process, USB LED indicator will blink with blue light. When the NVR finished duplicating the data to the USB device, the blue light will fade away.

⚠ **Note**: If any error occurs, including USB Backup function not enabled, USB LED indicator will show red to warn.

⚠ **Note:** USB device format should be FAT32 file system.

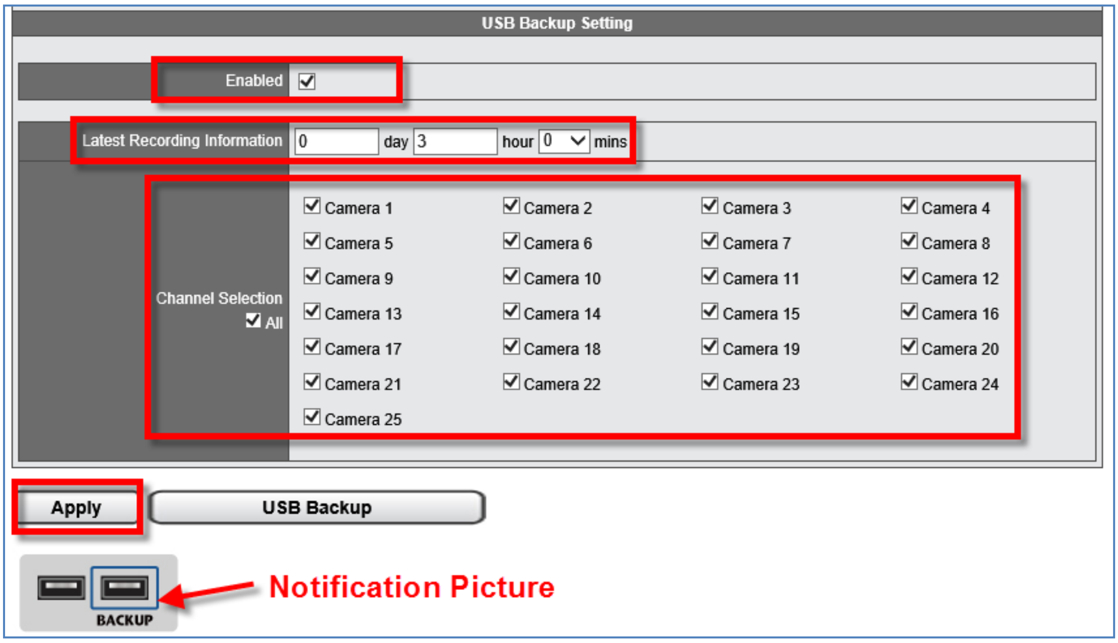
1. USB Backup

To enable the USB Backup button function and to setup the USB Backup button's channels and the latest time duration for future duplication, please select “**USB Backup**” from the drop-down menu of **Management.**


▼ Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover

⚠ **Note:** Hardware USB backup button is supported in DS-2000, DS-4000, DS-4200 Pro, DS-4200-RM Pro, DS-8200-RM Pro, DS-4200 Pro+, DS-4200-RM Pro+, DS-8200-RM Pro+, DS-4200-RMP Pro+, DS-8200-RMP Pro+, DS-4300 Pro+, DS-4300-RM Pro+, DS-8300-RM Pro+, DS-4300-RMP Pro+ and DS-8300-RMP Pro+ Series.

USB Backup Button Setting on Remote Web Browsers



USB Backup Setting

Enabled ☑

Latest Recording Information 0 day 3 hour 0 mins

Channel Selection ☑ All

☑ Camera 1	☑ Camera 2	☑ Camera 3	☑ Camera 4
☑ Camera 5	☑ Camera 6	☑ Camera 7	☑ Camera 8
☑ Camera 9	☑ Camera 10	☑ Camera 11	☑ Camera 12
☑ Camera 13	☑ Camera 14	☑ Camera 15	☑ Camera 16
☑ Camera 17	☑ Camera 18	☑ Camera 19	☑ Camera 20
☑ Camera 21	☑ Camera 22	☑ Camera 23	☑ Camera 24
☑ Camera 25			

- **Enable:** USB Backup button function can be enabled or disabled, for security concern.
- **The latest duration of recordings**: Users can set a maximum of days, hours and minutes to back up the latest video files.
- **Channel Selection**: Users can select certain camera channels or click "**All**" channels for future backup.
- **Apply:** Please click "**Apply**" to finish configuration.
- **USB Backup**: Save settings and export videos to USB device

After finishing setup, users can insert a USB device to the local NVR to back up the latest video files.

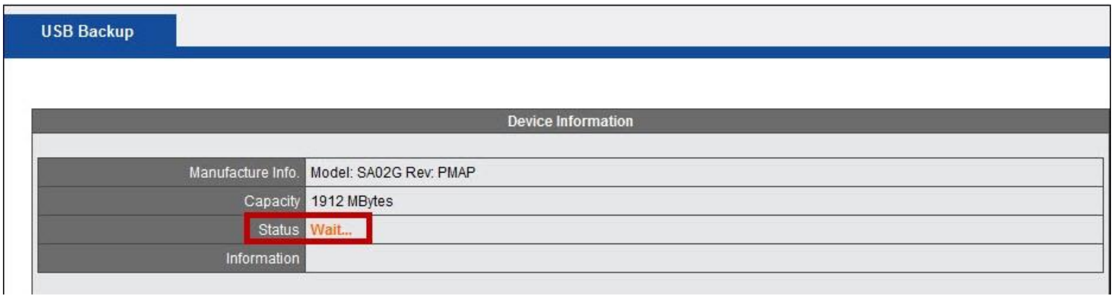
⚠ **Note: Notification Picture** is designed to notify users of the location of USB Backup port.

Software USB Backup Virtual Button

By clicking "**USB Backup**" button, NVR will save the settings (The latest duration of recordings and Channel selection) and export videos to USB device now. Please insert a USB device to start to back up the latest video files.

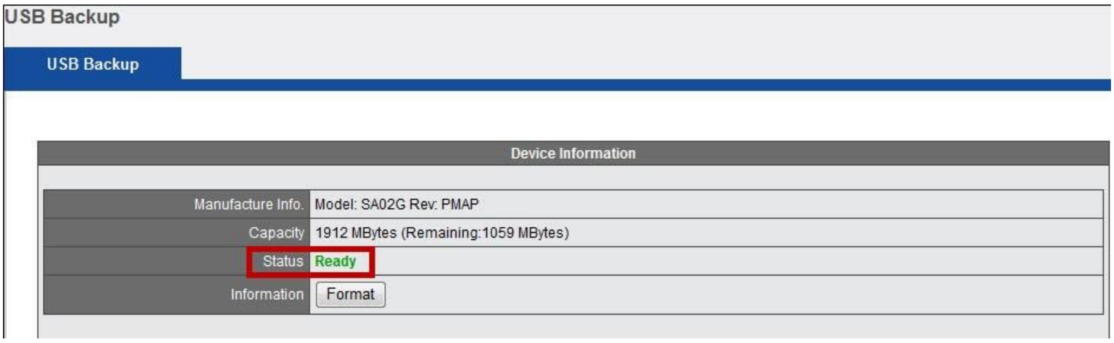
Device Information status

When a USB device is inserted to the NVR, the USB Backup Device Information in Remote Browser will show the status “**Wait... .**”


USB Backup
Device Information

Manufacture Info. Model: SA02G Rev: PMAP
Capacity 1912 MBytes
Status Wait...
Information

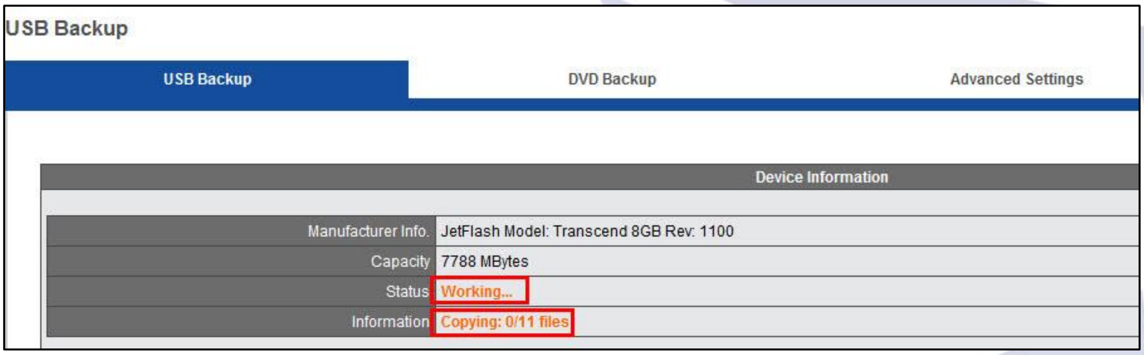
When the USB is ready to begin, the Device Information will show the status “**Ready,**” and the USB LED indicator will show blue.


USB Backup
USB Backup
Device Information
Format

Manufacture Info. Model: SA02G Rev: PMAP
Capacity 1912 MBytes (Remaining:1059 MBytes)
Status Ready
Information Format

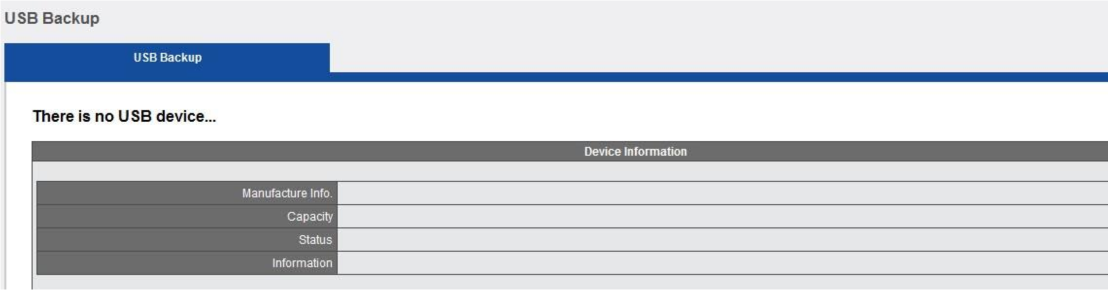
If you want to delete the current data in USB, please click “**Format**” to delete the current data of USB.

When NVR is in backup progress, the Device Information will show the status "**Working**," and the information "**Copying: ...files**."


USB Backup
USB Backup
DVD Backup
Advanced Settings
Device Information

Manufacturer Info. JetFlash Model: Transcend 8GB Rev: 1100
Capacity 7788 MBytes
Status Working...
Information Copying: 0/11 files

If there is no USB inserted into NVR, the screen will show “**There is no USB device…**” as below picture:



USB Backup

There is no USB device...

Device Information

Manufacture Info.

Capacity

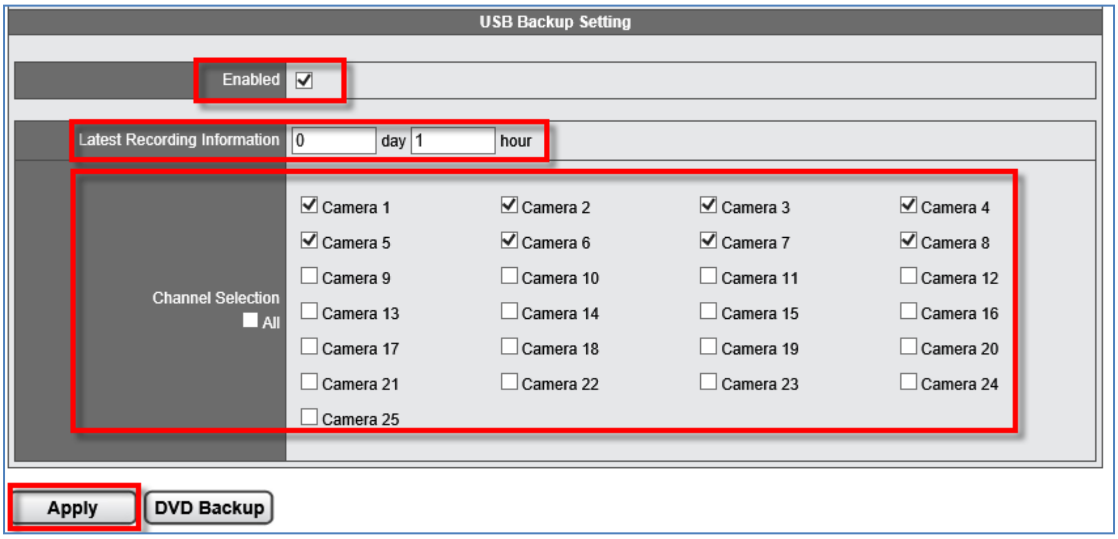
Status

Information

⚠ **Note**: NVRPlayer and NVRCheck will be downloaded with video files.

2. DVD Backup

USB Backup Button Setting in Remote Web Browsers



USB Backup Setting

Enabled ☑

Latest Recording Information: 0 day 1 hour

Channel Selection ☐ All

☑ Camera 1 ☑ Camera 2 ☑ Camera 3 ☑ Camera 4
☑ Camera 5 ☑ Camera 6 ☑ Camera 7 ☑ Camera 8
☐ Camera 9 ☐ Camera 10 ☐ Camera 11 ☐ Camera 12
☐ Camera 13 ☐ Camera 14 ☐ Camera 15 ☐ Camera 16
☐ Camera 17 ☐ Camera 18 ☐ Camera 19 ☐ Camera 20
☐ Camera 21 ☐ Camera 22 ☐ Camera 23 ☐ Camera 24
☐ Camera 25

- **Enable:** Hardware USB Backup button function can be enabled or disabled, for security concern
- **The latest duration of recordings**: Users can set a maximum of days and hours to back up the latest video files
- **Channel Selection**: Users can select certain camera channels or click “**All**” channels for future backup
- **Apply:** Please click “**Apply**” to finish configuration
- **DVD Backup**: Save settings and export videos to USB device

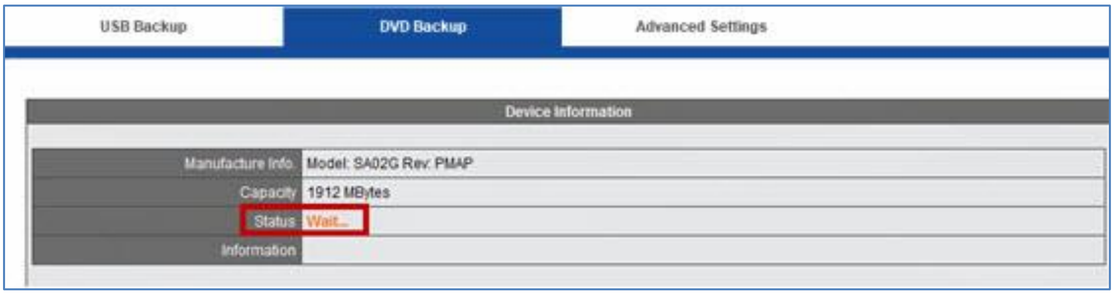
After finishing setup, users can insert a USB type DVD burner to the local NVR to back up the latest video files.

Software DVD Backup Virtual Button

By clicking “USB Backup” button, NVR will save the settings (The latest duration of recordings and Channel selection) and export videos to USB device now. Please insert a USB device to start to back up the latest video files.

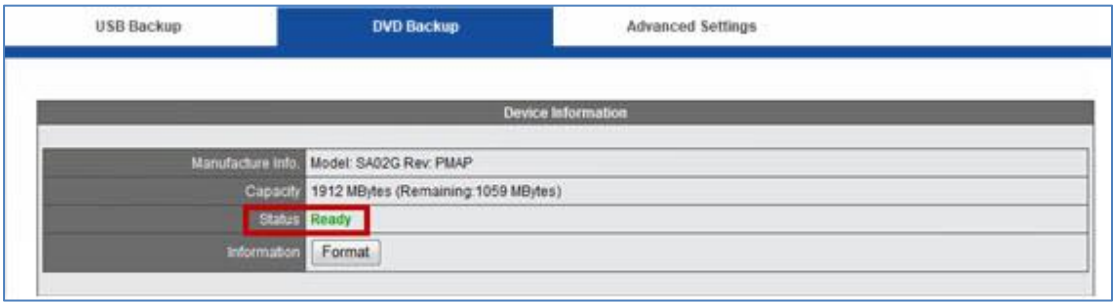
Device Information status

When a USB type DVD burner is inserted to NVR, Device Information of DVD Backup in Remote Browser will show the status “**Wait... .**”


USB Backup
DVD Backup
Advanced Settings
Device Information

Manufacture Info. Model: SA02G Rev: PMAP
Capacity 1912 MBytes
Status Wait...
Information

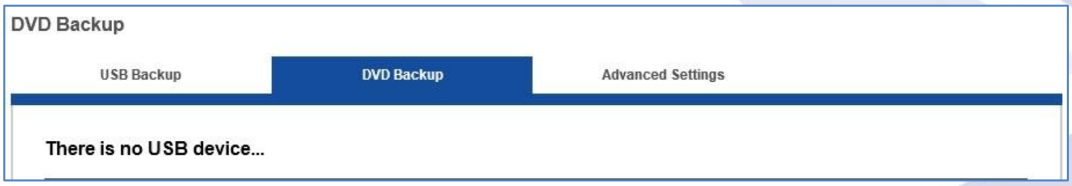
When the USB type DVD burner is ready to begin, the Device Information will show the status “**Ready,**” and the USB LED indicator will show blue.


USB Backup
DVD Backup
Advanced Settings
Device Information
Format

Manufacture Info. Model: SA02G Rev: PMAP
Capacity 1912 MBytes (Remaining:1059 MBytes)
Status Ready
Information

If you need to delete the current data in USB type DVD burner, please click “**Format**” to delete current data.

If there is no USB type DVD burner inserted into NVR, the screen will show “**There is no USB device…**”

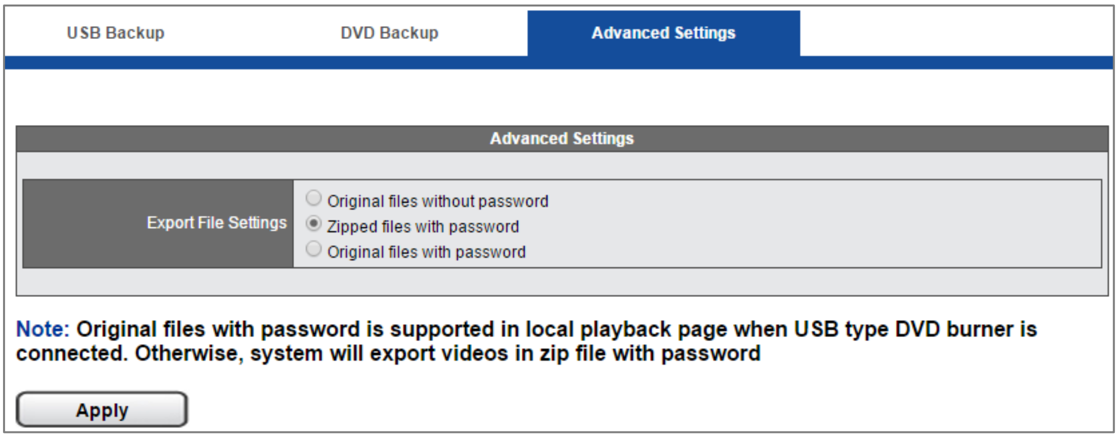

DVD Backup
USB Backup
DVD Backup
Advanced Settings

There is no USB device...

⚠ **Note**: NVRPlayer and NVRCheck will be downloaded with video files.

⚠ **Note:** DVD burner is supported in Pro+ series and Pro series.

3. Advance Settings



Export File Settings
○ Original files without password
● Zipped files with password
○ Original files with password

Note: Original files with password is supported in local playback page when USB type DVD burner is connected. Otherwise, system will export videos in zip file with password

(1) Video Export Setting

Based on video security level, NVR offers 3 formats to export recorded videos on playback page:

① **Original video files without password** (default)
NVR will directly export video files to USB type device.

② **Zipped files with password**
NVR will encrypt exported files to external USB type device in **ZIP format**. User needs to decide password when exporting files on playback page.

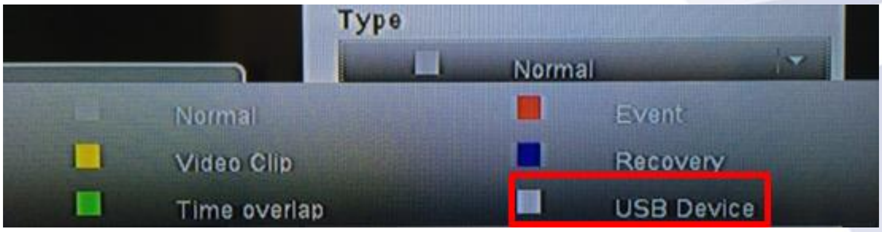
③ **Original files with password** (For local export to USB type device)
This format allows user to safely export videos (password) and directly playback exported videos on local interface (with no need to install unzip software).

⚠ **Note:** "Original files with password "setting is supported on **local playback** for video export. Otherwise, NVR will export videos in zipped files with password.

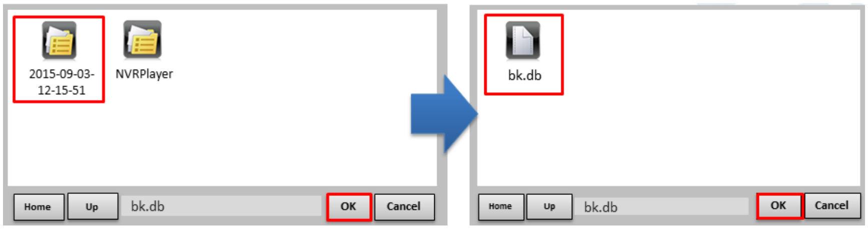
⚠ **Note:** Users can playback videos exported in "original files with password" **on NVR (playback page)** and **PC (NVRPlayer)**:

[Method1] On NVR playback page:

Step1. Select **USB Device** as recording type.

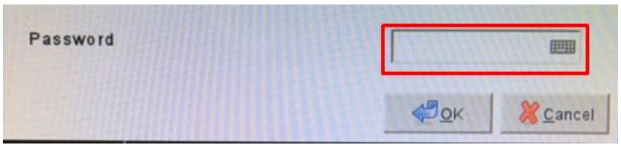


Step2. Select a **video folder**. There is a “**bk.db”** file to playback videos.


2015-09-03-12-15-51
NVRPlayer
Home
Up
bk.db
OK
Cancel
bk.db
Home
Up
bk.db
OK
Cancel

⚠ **Note:** The name of video folder is the time when users press export button.

Step3. Enter password


Password
OK
Cancel

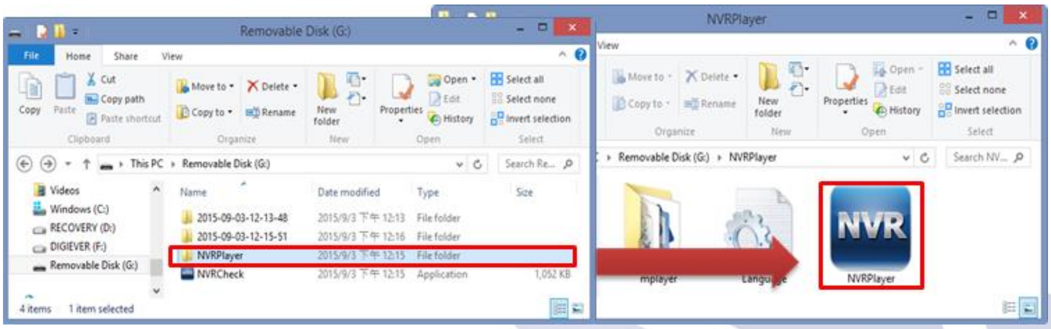
Step4. Select **date, time** and **camera**

⚠ **Note:** The calendar will display the last date of video file in the USB device.

Step5. Click “**play**” button

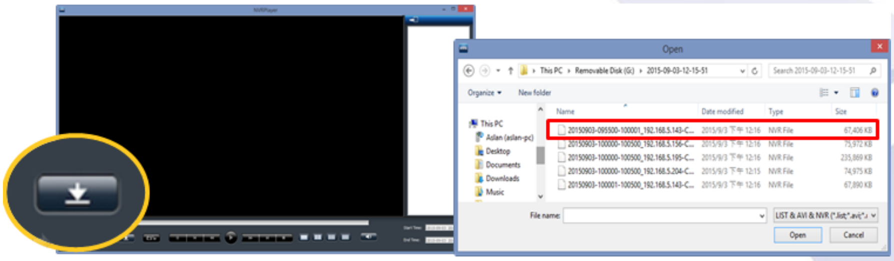
[Method2] On remote PC via NVRPlayer

Step1. Execute NVRPlayer

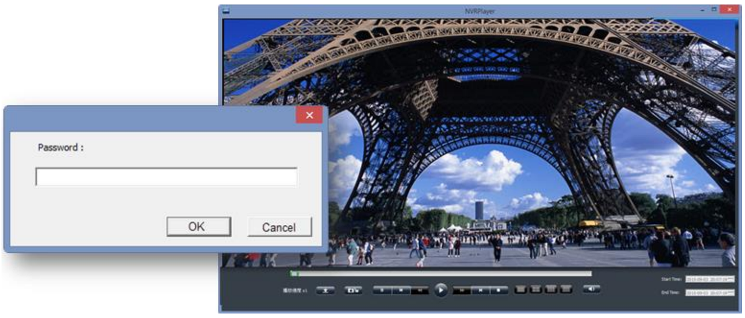

Removable Disk (G:)
NVRPlayer
File
Home
Share
View
Copy
Paste
Cut
Copy path
Paste shortcut
Move to
Copy to
Delete
Rename
New folder
Properties
Open
Edit
History
Select all
Select none
Invert selection
This PC
Removable Disk (G:)
Videos
Windows (C:)
RECOVERY (D:)
DIGIEVER (F:)
Removable Disk (G:)
4 items
1 item selected
NVRPlayer
NVRPlayer

Name	Date modified	Type	Size
2015-09-03-12-13-48	2015/9/3 下午 12:13	File folder	
2015-09-03-12-15-51	2015/9/3 下午 12:16	File folder	
NVRPlayer	2015/9/3 下午 12:15	File folder	
NVRCheck	2015/9/3 下午 12:15	Application	1,052 KB

Step2. Open a video file

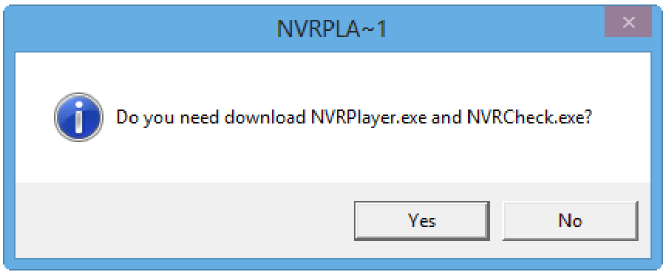

Open
This PC
Removable Disk (G:)
2015-09-03-12-15-51
Organize
New folder
Name
Date modified
Type
Size
Desktop
Documents
Downloads
Music
File name:
LIST & AVI & NVR
Open
Cancel

Step3. Enter password and NVRPlayer will start to playback video.



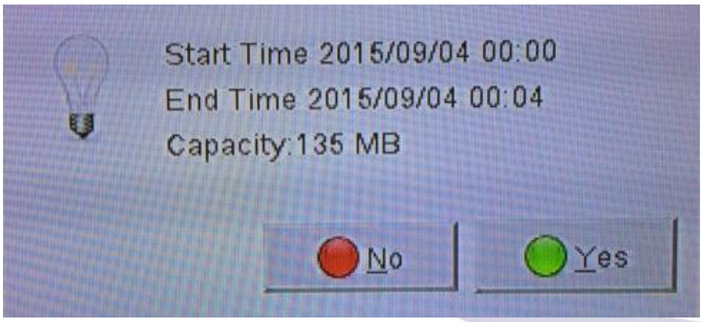
Export Video on Playback Page

A window will pop up after users click export button on playback page.


NVRPLA~1

Do you need download NVRPlayer.exe and NVRCheck.exe?

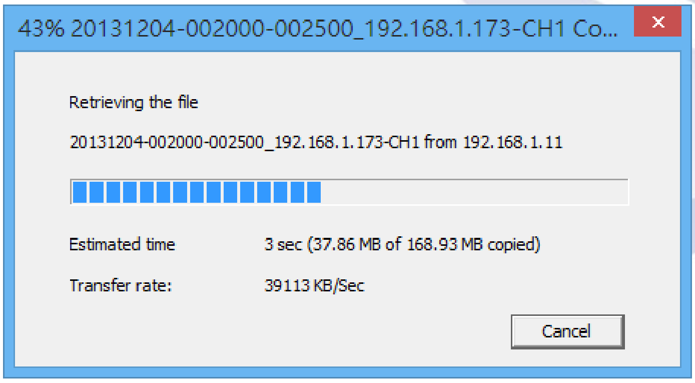
NVR will display the capacity of video file on local NVR.


Start Time 2015/09/04 00:00

End Time 2015/09/04 00:04

Capacity:135 MB

On remote browser, a window will pop up to display download status.


43% 20131204-002000-002500_192.168.1.173-CH1 Co...

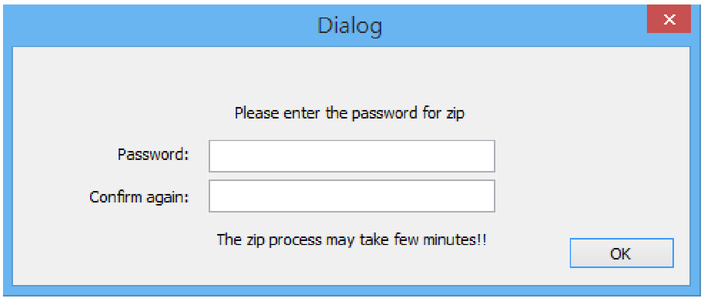
Retrieving the file

20131204-002000-002500_192.168.1.173-CH1 from 192.168.1.11

Estimated time 3 sec (37.86 MB of 168.93 MB copied)

Transfer rate: 39113 KB/Sec

On remote web browser, a window will pop up to ask users to enter password for encryption **after** successfully exporting files.
On local NVR, a window will pop up to ask users to enter password for encryption **before** exporting files.

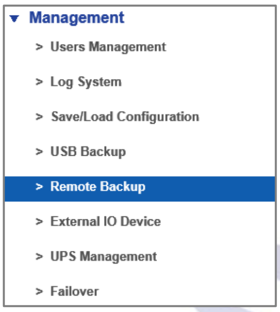

Dialog
Please enter the password for zip
Password:
Confirm again:
The zip process may take few minutes!!
OK

5.6.5 Remote Backup

To ensure the security of confidential videos, NVR provides **remote backup** to back up important recorded videos to NAS so as to storage confidential videos for a longer time.

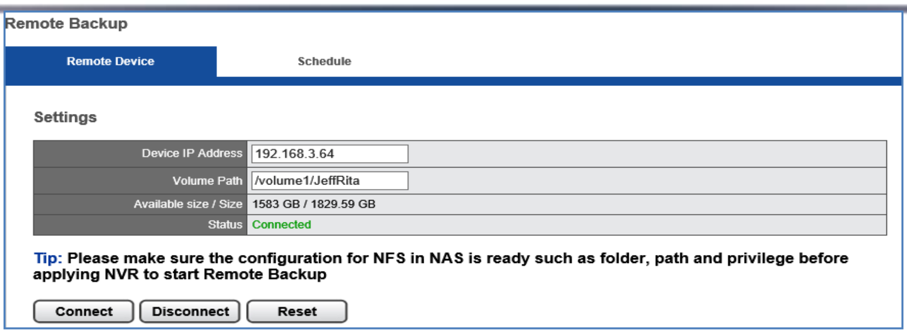
⚠ **Note:** ASUSTOR NAS is supported for now in LAN.

Please select "**Remote Backup**" from the drop-down menu of **Management** to begin.


Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover

⚠ **Note:** Please make sure the external NAS's Network File System configuration is ready including folder, path and privilege, before connecting the NVR server to the external NAS for remote backup.

1. **Connect to Device**



Device IP Address: 192.168.3.64
Volume Path: /volume1/JeffRita
Available size / Size: 1583 GB / 1829.59 GB
Status: Connected

Tip: Please make sure the configuration for NFS in NAS is ready such as folder, path and privilege before applying NVR to start Remote Backup

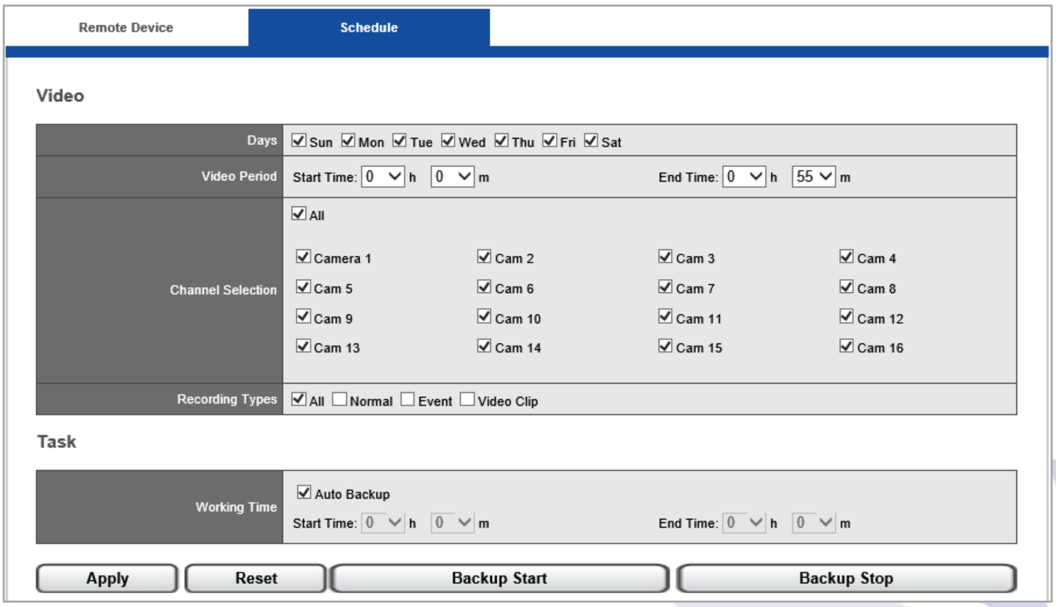
Enter **IP Address** and **Volume Path** of the device that you set up in advance to execute remote backup, then click "**Connect**" button.

Once NVR successfully connects to the device, the status will show "**Connected**" and display the total size of the device as well as and the available size for remote backup.

As above picture, the total size of the device is 1829.59GB and it has 1582GB available size for remote backup.

2. Set up Remote Schedule Backup

Please go to configuration page: Management > Remote Backup > Schedule



Days: ☑ Sun ☑ Mon ☑ Tue ☑ Wed ☑ Thu ☑ Fri ☑ Sat
Video Period: Start Time: 0 h 0 m End Time: 0 h 55 m
Channel Selection: ☑ All
☑ Camera 1 ☑ Cam 2 ☑ Cam 3 ☑ Cam 4
☑ Cam 5 ☑ Cam 6 ☑ Cam 7 ☑ Cam 8
☑ Cam 9 ☑ Cam 10 ☑ Cam 11 ☑ Cam 12
☑ Cam 13 ☑ Cam 14 ☑ Cam 15 ☑ Cam 16
Recording Types: ☑ All ☐ Normal ☐ Event ☐ Video Clip
Working Time: ☑ Auto Backup
Start Time: 0 h 0 m End Time: 0 h 0 m

(1) Video

Please set up the video that you would like to back up by setting **Days, Video Period, Channel Selection** and **Recording type(All/ Normal/ Event/ Video Clip)**.

(2) Task

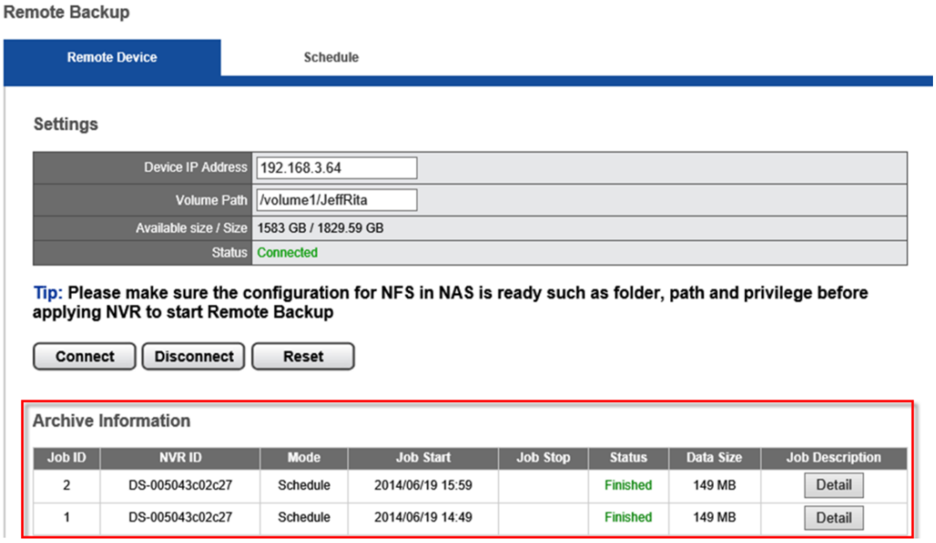
You can select "**Auto Backup**" to upload recorded videos to NAS **3 minutes later** when the video of selected time and channels are all saved in NVR.

Or, you can fill in start time and end time to upload recorded video at that time period.

Then, click “**Apply**” button to save setting.

⚠ **Note:** NVR will stop remote backup when users click “**Backup Stop**” button

3. Check Job information on Remote Device page > Archive Information


Remote Backup
Remote Device
Schedule

Settings

Device IP Address	192.168.3.64
Volume Path	/volume1/JeffRita
Available size / Size	1583 GB / 1829.59 GB
Status	Connected

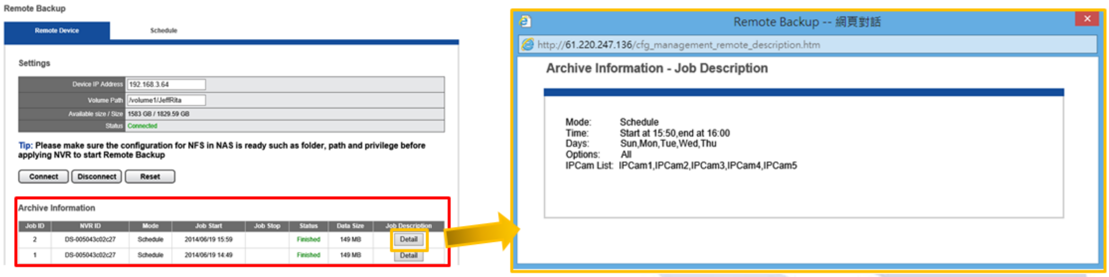
Tip: Please make sure the configuration for NFS in NAS is ready such as folder, path and privilege before applying NVR to start Remote Backup

Connect
Disconnect
Reset

Archive Information

Job ID	NVR ID	Mode	Job Start	Job Stop	Status	Data Size	Job Description
2	DS-005043c02c27	Schedule	2014/06/19 15:59		Finished	149 MB	Detail
1	DS-005043c02c27	Schedule	2014/06/19 14:49		Finished	149 MB	Detail

Archive Information is a remote backup history designed for users to record past remote backup jobs. Once NVR starts to back up videos, NVR will show a job ID in Archive Information


Remote Backup -- 網頁對話
http://61.220.247.136/cfg_management_remote_description.htm

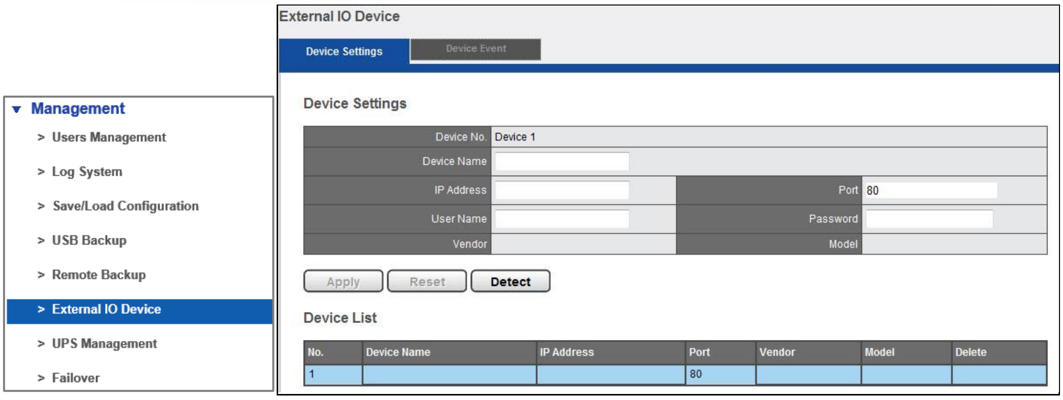
Archive Information - Job Description

Mode: Schedule
Time: Start at 15:50,end at 16:00
Days: Sun,Mon,Tue,Wed,Thu
Options: All
IPCam List: IPCam1,IPCam2,IPCam3,IPCam4,IPCam5

Clicking “**Detail**” button in Jon Description column can view detailed information of remote information.

5.6.6 External IO Device

Please select “**External IO Device**” from the drop-down menu of **Management** to begin.


Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover
External IO Device
Device Settings
Device Event
Apply
Reset
Detect

Device Settings

Device No.	Device 1		
Device Name			
IP Address		Port	80
User Name		Password	
Vendor		Model	

Device List

No.	Device Name	IP Address	Port	Vendor	Model	Delete
1			80			

Enter necessary information to add devices manually, including: **Device Name**, **IP Address**, **User Name** and **Password.**

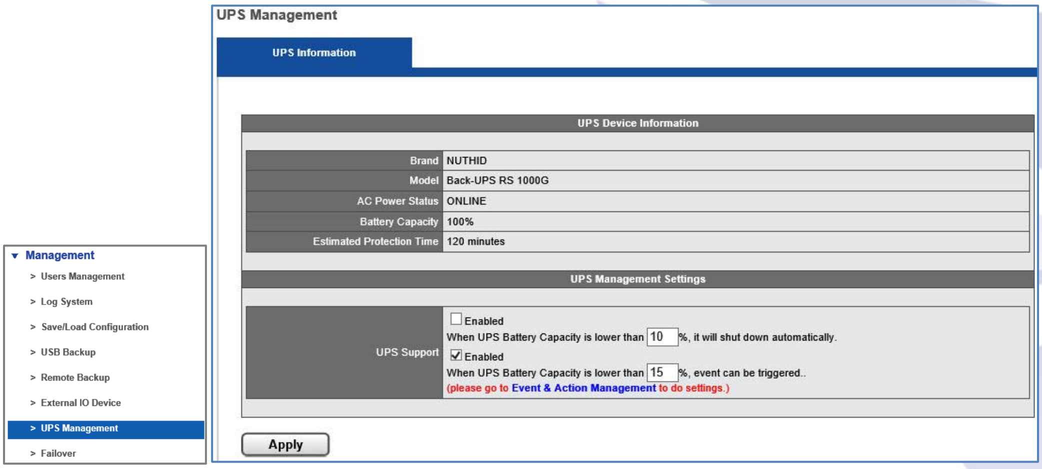
Click “**Detect**” to check whether connection is successful or not.
Please click “**Apply** ”to finish the setting. "Vender" and "Model" will show up automatically, if detectable.

Camera List shows all available device information including: **Camera Name**, **IP Address**, **Port**, **Vender** and **Model**.

Also, **Device Event** will show the event originally set in the device.

5.6.7 UPS Management

Please select “**UPS Management**” from the drop-down menu of **Management** to begin.
UPS (Uninterruptible Power Supply) is designed to provide emergency power to NVR when encountering unexpected power outage.


Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover
UPS Management
UPS Information
Apply

UPS Device Information

Brand	NUTHID
Model	Back-UPS RS 1000G
AC Power Status	ONLINE
Battery Capacity	100%
Estimated Protection Time	120 minutes

UPS Management Settings

UPS Support
☐ Enabled
When UPS Battery Capacity is lower than 10 %, it will shut down automatically.
☑ Enabled
When UPS Battery Capacity is lower than 15 %, event can be triggered..
(please go to Event & Action Management to do settings.)

⚠**Note**: NVR supports OMRON, APC, CyberPower and YEC UPS for now.

1. **UPS Device Information**

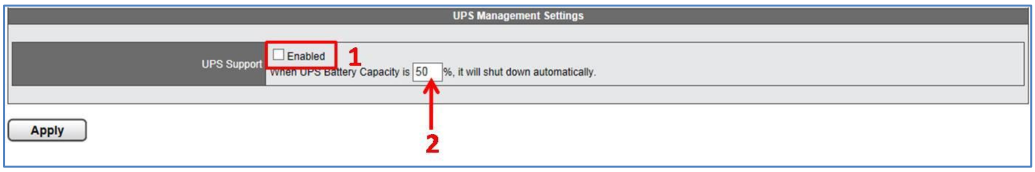
   Users can obtain basic UPS information from UPS device information, including **brand, model, AC power status, battery capacity and estimated protection time.**

   Estimated protection time allows users to realize the estimated time to progress regular monitoring.

2. **UPS Management Settings**

   ① **Smart Shutdown and Startup**

   Smart Shutdown and Startup is designed to maintain usual surveillance performance when users encounter power outage. Users can set up when to automatically shut down NVR (Sleep Mode). Once UPS battery is over the percentage of capacity, NVR will start up automatically.

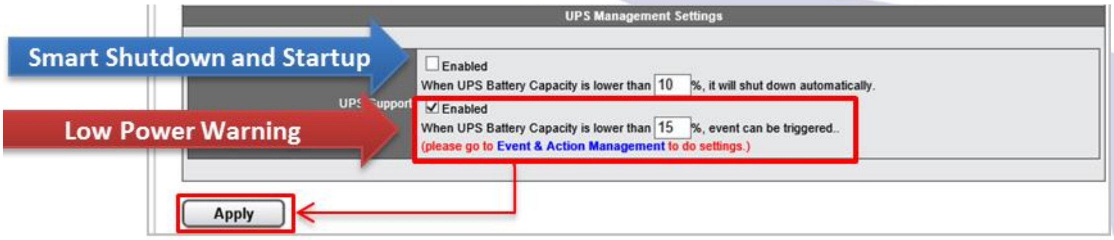


☐ Enabled
When UPS Battery Capacity is 50 %, it will shut down automatically.

Please enable this feature and fill a number to automatically shut down or startup NVR

② **UPS Low Power Warning**

UPS Low Power Warning is a pre-notice to warn users that UPS is nearly out of power before NVR automatically shutdown to sleep mode.



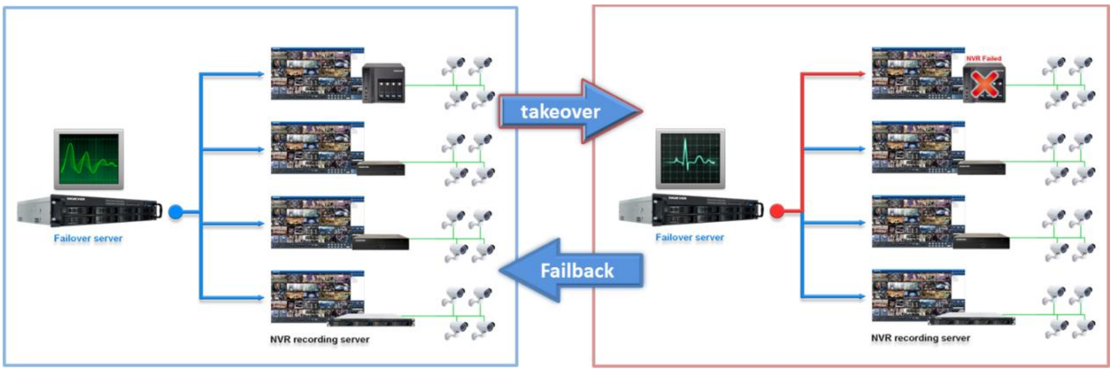
☐ Enabled
When UPS Battery Capacity is lower than 10 %, it will shut down automatically.
☑ Enabled
When UPS Battery Capacity is lower than 15 %, event can be triggered..
(please go to Event & Action Management to do settings.)

Please enable this feature and fill a number to automatically shut down or startup NVR. Click “**Apply**” button to save the setting.
Then, go to Event & Action Management page to do setting. Please refer to **5.2.3 Event & Action Management** for detail setting.

⚠ **Note**: Please make the percentage of Low Power Warning **higher** than that of Smart Shutdown and Startup.

5.6.8 Failover

NVR failover is a reliable backup solution to maintain IP video surveillance in case of NVR recording server failure situation. One failover can monitor up to 4 NVR recording servers in default. One failover server can monitor up to 16 NVR recording server.


takeover
Failback
Failover server
NVR recording server
NVR Failed
Failover server
NVR recording server

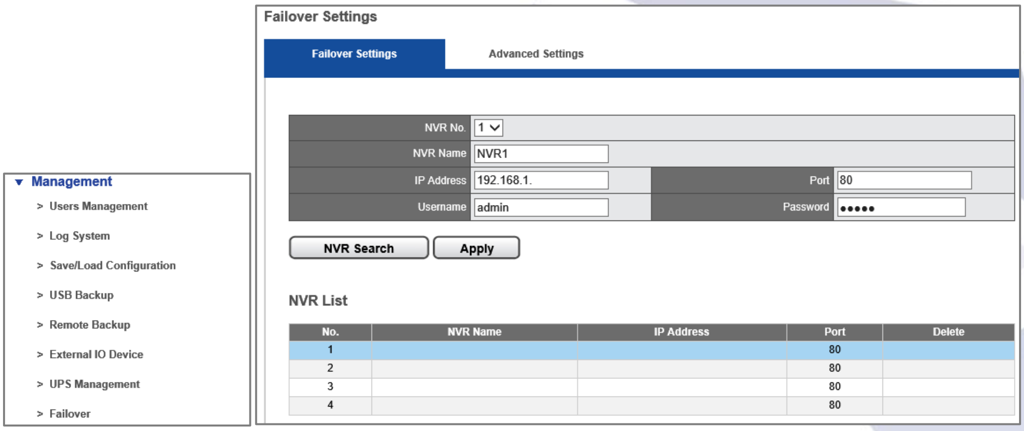
1. Failover server configuration

(1) Prepare a NVR as a failover server to monitor and take over failed NVR recording servers. Please complete **Quick Configuration** to complete system setup. You can skip camera setting since all existing camera settings of failover server will be removed when failover function is applied.

> ⚠ **Note: NVR Pro and Pro+ series** can be treated as failover server. All NVR can be monitored by failover server.
>
> ⚠ **Note:** To configure NVR failover feature, please **upgrade firmware 2.1.X.54 or above** on both failover server and NVR recording server.

(2) Add NVR recording server

Please select “**Failover**” from the drop-down menu of **Management** to begin.

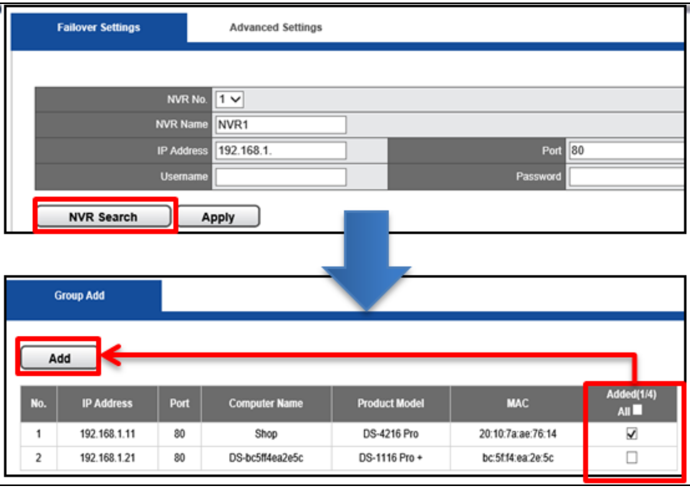
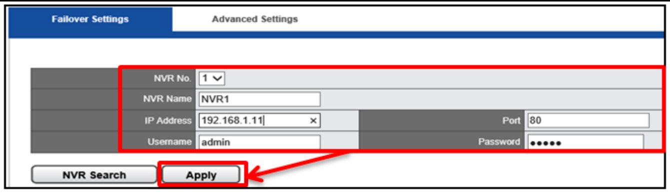

Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover
Failover Settings
Failover Settings
Advanced Settings
NVR Search
Apply

NVR No. 1
NVR Name NVR1
IP Address 192.168.1.
Port 80
Username admin
Password •••••

NVR List

No.	NVR Name	IP Address	Port	Delete
1			80	
2			80	
3			80	
4			80	

Click “**NVR Search**” to select NVR in LAN or manually fill in NVR information to add NVR recording server.

NVR Search	
Manually Add	

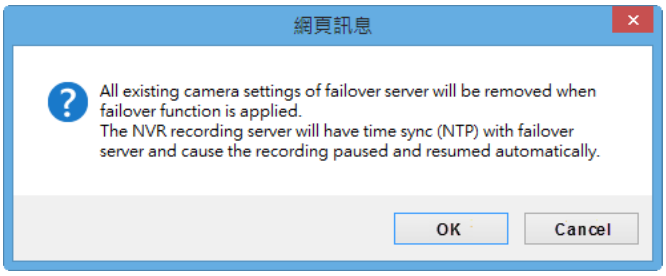
Failover Settings
Advanced Settings
NVR Search
Apply
Group Add
Add

NVR No. 1
NVR Name NVR1
IP Address 192.168.1.
Port 80
Username
Password

No.	IP Address	Port	Computer Name	Product Model	MAC	Added(1/4) All ☐
1	192.168.1.11	80	Shop	DS-4216 Pro	20:10:7a:ae:76:14	☑
2	192.168.1.21	80	DS-bc5ff4ea2e5c	DS-1116 Pro +	bc:5f:f4:ea:2e:5c	☐

NVR No. 1
NVR Name NVR1
IP Address 192.168.1.11
Port 80
Username admin
Password •••••

A window will pop up before failover server starts adding NVR recording server. Please read it carefully and click “**OK**” button to continue.



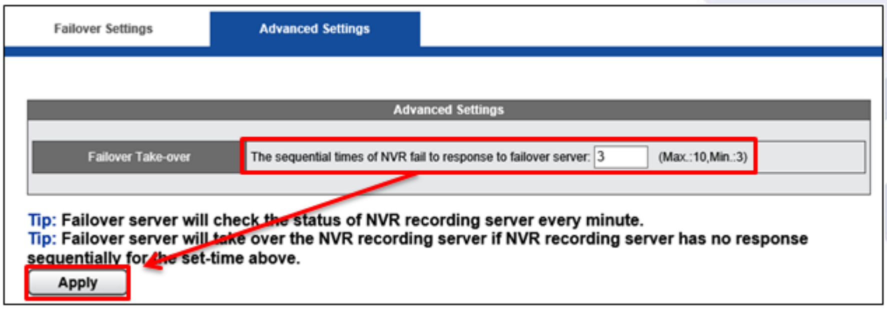
網頁訊息
OK
Cancel

All existing camera settings of failover server will be removed when failover function is applied.
The NVR recording server will have time sync (NTP) with failover server and cause the recording paused and resumed automatically.

⚠ **Note:** Failover license channels must be more than NVR recording server license channels.

⚠ **Note:** NVR recording server can be added into “one” failover server.

(3) Set up the time when to take over NVR recording server in **Advanced Setting** page. Then, click “**Apply**” button.



Failover Settings
Advanced Settings
Advanced Settings
Apply

Failover Take-over: The sequential times of NVR fail to response to failover server: 3 (Max.:10,Min.:3)

Tip: Failover server will check the status of NVR recording server every minute.
Tip: Failover server will take over the NVR recording server if NVR recording server has no response sequentially for the set-time above.

2. Failover server monitoring

(1)NVR Status: network connection lost, NVR software and hardware failure

Failover server will check the status of NVR recording server **every minute**. User can set up when to make failover server take over the NVR recording server if NVR recording server has no response sequentially for the set-time. (Default is 3 times)

(2)Recording Status: HDD failure

Failover server will check the HDD status of NVR recording server **every minute**. Once NVR recording server cannot record video to HDD, failover server will take over it, except for RAID fault tolerance situation.

3. What fails over?

Failover server only takes over below settings of failed NVR recording server to maintain IP video surveillance system:
Camera settings, Recording settings, Event and action settings, Email settings, Server setting (server name with UPnP and admin username/password)

⚠ **Note**: NVR failover server will synchronize NVR's configuration **each hour**.

4. Failback: cease take-over

(1)NVR Status:

Failover server will check the status of NVR recording server **every minute**. Once failover server detects that NVR has been successfully reconnected network environment, failover NVR will stop take over that NVR.

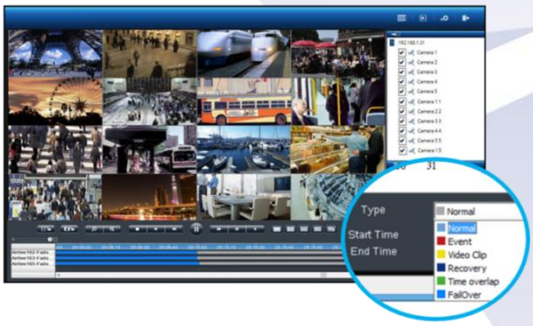
⚠ **Note**: The **IP address** and **configuration** of NVR recording server must have its original setting.

(2)Recording Status: Change to a new HDD

Once failover server detects NVR recording server has changed to a new HDD, failover server will stop take over NVR recording server

5. Playback

On NVR recording server, users can playback videos recorded in failover server on **remote web browsers**. Videos recorded in failover server display in **light blue** color.



5.6.9 SNMP

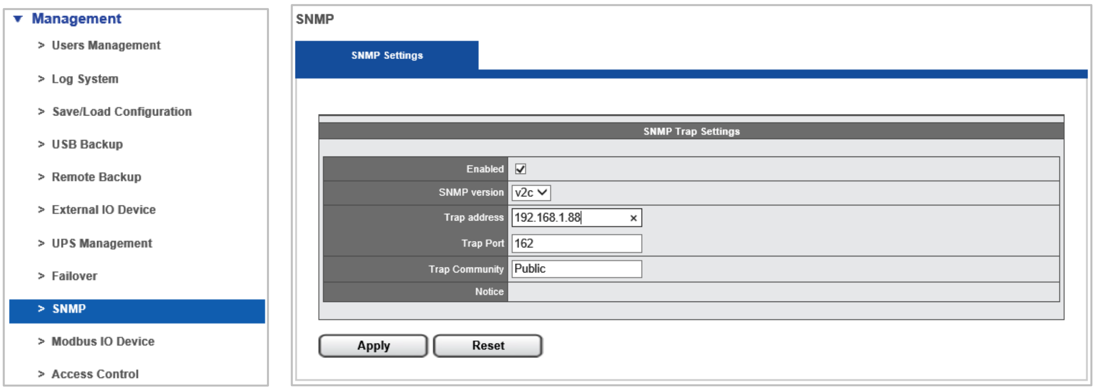
To make users easily manage and monitor devices on network, NVR supports **SNMP (Simple Network Management Protocol)** to intelligently notify users of event triggered via SNMP trap.

⚠ **Note:** SNMP Trap is supported in Pro+ and Pro series.

Users can configure **up to 7 event types** to inform security guard of event occurred via SNMP server, including **recording error, UPS low power warning, CPU temperature warning, CPU fan warning, system fan warning, HDD error warning and HDD fail warning**

- **SNMP Settings**

Please "**Enable**" SNMP Trap setting and fill in **Trap address** and **Trap Community**. Then, click "**Apply**" button to connect SNMP device.


Management
> Users Management
> Log System
> Save/Load Configuration
> USB Backup
> Remote Backup
> External IO Device
> UPS Management
> Failover
> SNMP
> Modbus IO Device
> Access Control
SNMP
SNMP Settings
SNMP Trap Settings
Apply
Reset

Enabled ☑
SNMP version v2c
Trap address 192.168.1.88
Trap Port 162
Trap Community Public
Notice

Now, you can go to configuration page (Recording & Event > Event & Action Management) to set SNMP Trap as action.

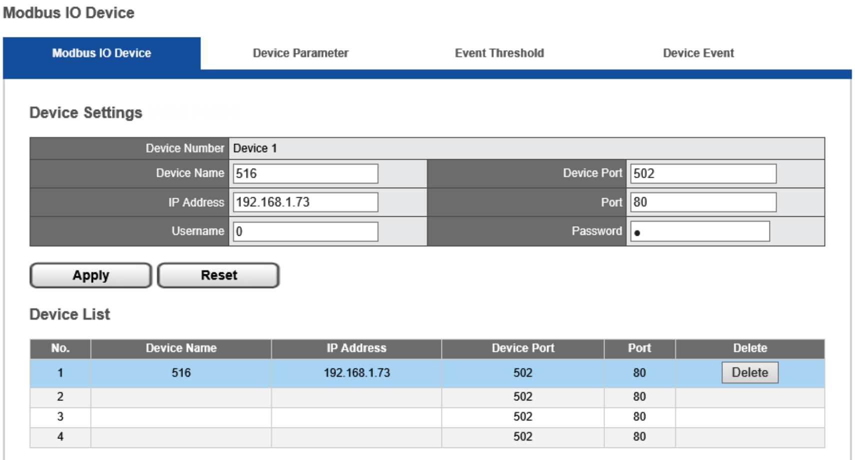
5.6.10 ModBus IO Device

NVR supports Modbus Analog I/O-Digital I/O devices using Modbus protocol to make surveillance deployment more flexible to satisfy diverse project requirements such as factory and warehouse where users pay more attention on environment control. Users can configure desired events (digital Input or analog input) and corresponding actions (digital output or analog output) by connecting to external Modbus AI/O box.

⚠ **Note:** one NVR can connect up to 4 Modbus Analog I/O-Digital I/O devices in default. To connect NVR to more Modbus Analog I/O-Digital I/O devices, please contact sales.

⚠ **Note:** NVR supports Advantech ’s Modbus Analog I/O-Digital I/O device for now: ADAM-6024

1. ModBus IO Device


Modbus IO Device
Modbus IO Device
Device Parameter
Event Threshold
Device Event
Apply
Reset

Device Settings

Device Number	Device 1		
Device Name	516	Device Port	502
IP Address	192.168.1.73	Port	80
Username	0	Password	•

Device List

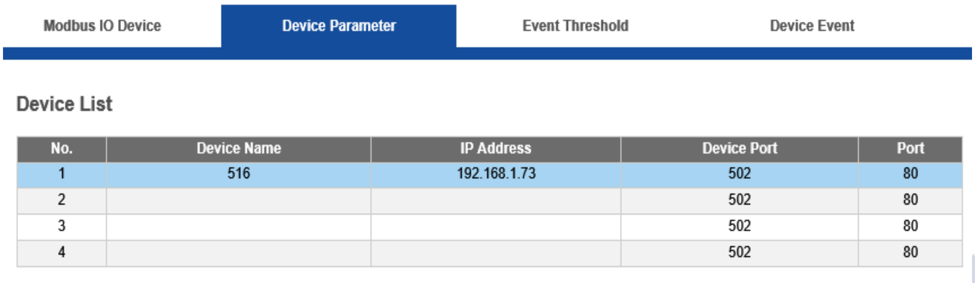
No.	Device Name	IP Address	Device Port	Port	Delete
1	516	192.168.1.73	502	80	Delete
2			502	80	
3			502	80	
4			502	80	

To add I/O device to NVR, please fill in **Device Name, IP address, Device Port, Port, Username** and **Password**. And, click “**Apply**” button to add new advice.

⚠ **Note:** If the access device has no username/password, please freely enter any words in Username and Password.

2. Device Parameter

Please choose a device in Device List to set up its parameter.

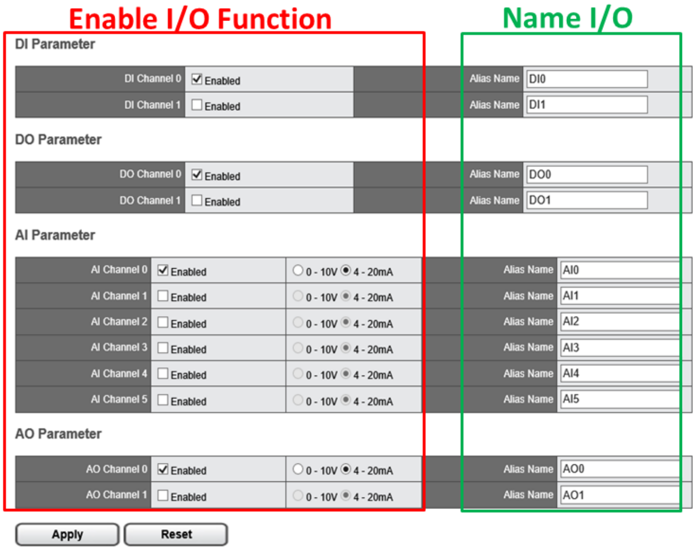

Modbus IO Device
Device Parameter
Event Threshold
Device Event

Device List

No.	Device Name	IP Address	Device Port	Port
1	516	192.168.1.73	502	80
2			502	80
3			502	80
4			502	80

“Enable” I/O channel and select correct input range for AI/O parameter.

Users can also **edit I/O name** for quick event and action setting.



DI Parameter

DI Channel 0 ☑ Enabled Alias Name DI0
DI Channel 1 ☐ Enabled Alias Name DI1

DO Parameter

DO Channel 0 ☑ Enabled Alias Name DO0
DO Channel 1 ☐ Enabled Alias Name DO1

AI Parameter

AI Channel 0 ☑ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AI0
AI Channel 1 ☐ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AI1
AI Channel 2 ☐ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AI2
AI Channel 3 ☐ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AI3
AI Channel 4 ☐ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AI4
AI Channel 5 ☐ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AI5

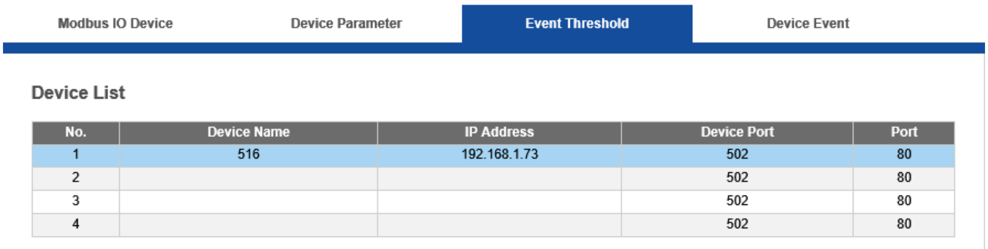
AO Parameter

AO Channel 0 ☑ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AO0
AO Channel 1 ☐ Enabled ○ 0 - 10V ● 4 - 20mA Alias Name AO1

Click “**Apply**” button to save setting

3. Event Threshold

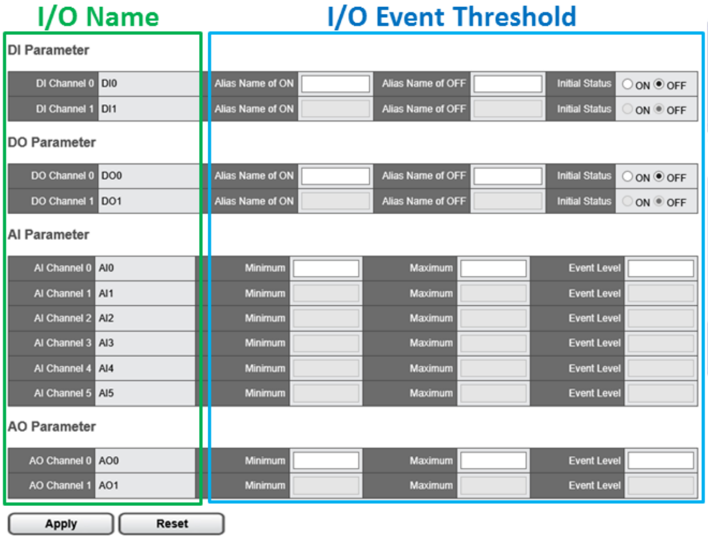
Please choose a device in Device List to set up its parameter.



Device List

No.	Device Name	IP Address	Device Port	Port
1	516	192.168.1.73	502	80
2			502	80
3			502	80
4			502	80

Users can base on I/O name to set up event trigger threshold which is enabled in device parameter page. Please click “**Apply**” button to apply setting.



DI Parameter

DI Channel 0 DI0 Alias Name of ON Alias Name of OFF Initial Status ○ ON ● OFF
DI Channel 1 DI1 Alias Name of ON Alias Name of OFF Initial Status ○ ON ● OFF

DO Parameter

DO Channel 0 DO0 Alias Name of ON Alias Name of OFF Initial Status ○ ON ● OFF
DO Channel 1 DO1 Alias Name of ON Alias Name of OFF Initial Status ○ ON ● OFF

AI Parameter

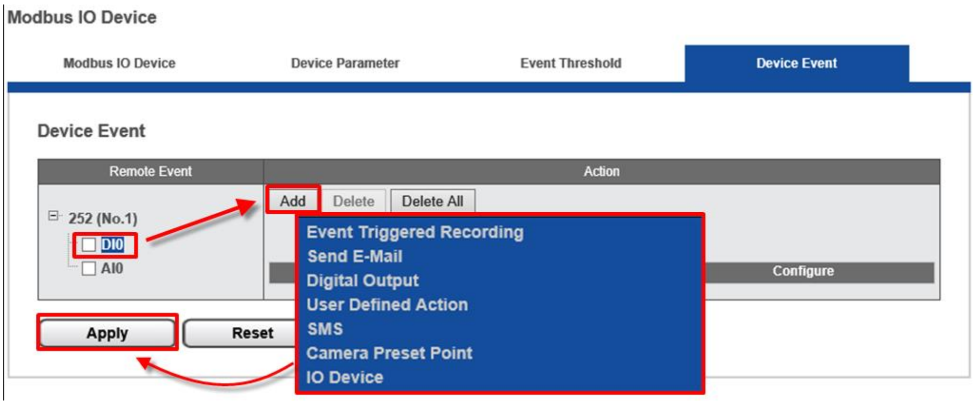
AI Channel 0 AI0 Minimum Maximum Event Level
AI Channel 1 AI1 Minimum Maximum Event Level
AI Channel 2 AI2 Minimum Maximum Event Level
AI Channel 3 AI3 Minimum Maximum Event Level
AI Channel 4 AI4 Minimum Maximum Event Level
AI Channel 5 AI5 Minimum Maximum Event Level

AO Parameter

AO Channel 0 AO0 Minimum Maximum Event Level
AO Channel 1 AO1 Minimum Maximum Event Level

4. Device Event

Select an event from event column, click “**Add**” button to add corresponding action. After all setting are done, please click “**Apply**” button to save event setting


Modbus IO Device
Modbus IO Device
Device Parameter
Event Threshold
Device Event
Device Event
Remote Event
Action
Add
Delete
Delete All
252 (No.1)
DI0
AI0
Event Triggered Recording
Send E-Mail
Digital Output
User Defined Action
SMS
Camera Preset Point
IO Device
Configure
Apply
Reset

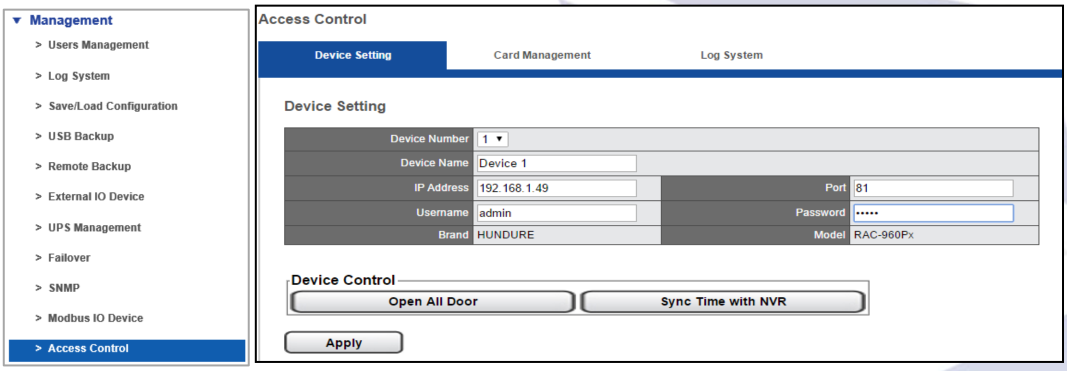
5.6.11 Access Control

NVR supports access control system for door monitoring and card management. Users can centrally monitor/open all doors and control who can access the door by adding card information to each card reader after the integration between NVR and access control. NVR also allows all access control systems to synchronize with NVR’s time for future log tracking. Besides, via **data filter**, users can easily check historical access information and export desired data to your PC.

⚠ **Note:** One NVR can connect up to 4 access control devices in default. To connect NVR to more access controls, please contact sales.

⚠ **Note:** NVR supports HUNDURE’s access control system for now: RAC-960 and RAC-970

1. Device Setting


Management
Users Management
Log System
Save/Load Configuration
USB Backup
Remote Backup
External IO Device
UPS Management
Failover
SNMP
Modbus IO Device
Access Control
Access Control
Device Setting
Card Management
Log System
Device Setting
Device Control
Open All Door
Sync Time with NVR
Apply

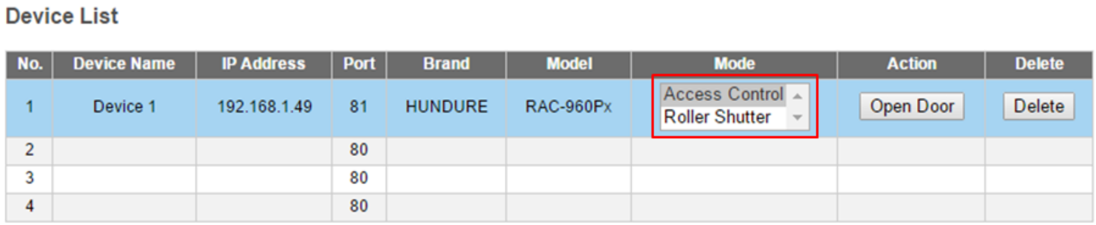
Device Number: 1
Device Name: Device 1
IP Address: 192.168.1.49
Port: 81
Username: admin
Password: •••••
Brand: HUNDURE
Model: RAC-960Px

To connect to access control device, please fill in **Device Name, IP address, Port, Username** and **Password.** Then, click “**Apply**” button to add advice.

⚠ **Note:** If the access device has no username/password, please freely enter any words in Username and Password.

On device control, users can click “**Sync Time with NVR**” button to synchronize its time with NVR or click “**Open All Door**” to open all doors controlled by this device.

NVR will display the device added to NVR in Device List. Users can choose a mode from **Access Control** and **Roller Shutter**.



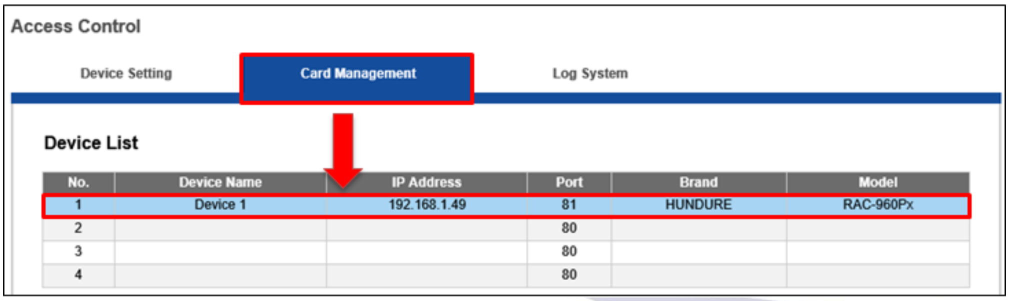
Device List

No.	Device Name	IP Address	Port	Brand	Model	Mode	Action	Delete
1	Device 1	192.168.1.49	81	HUNDURE	RAC-960Px	Access Control Roller Shutter	Open Door	Delete
2			80					
3			80					
4			80					

- ⚠ **Note: Access control mode** means users can access the door via beeping a valid card to reader
- ⚠ **Note: Roller shutter mode** means users can push control button (up or down) to open roller shutter via beeping a valid card to the reader.

2. Card Management

In this page, users can add, modify and delete reader’s card information. Please select a device in Device List to start adding card information.

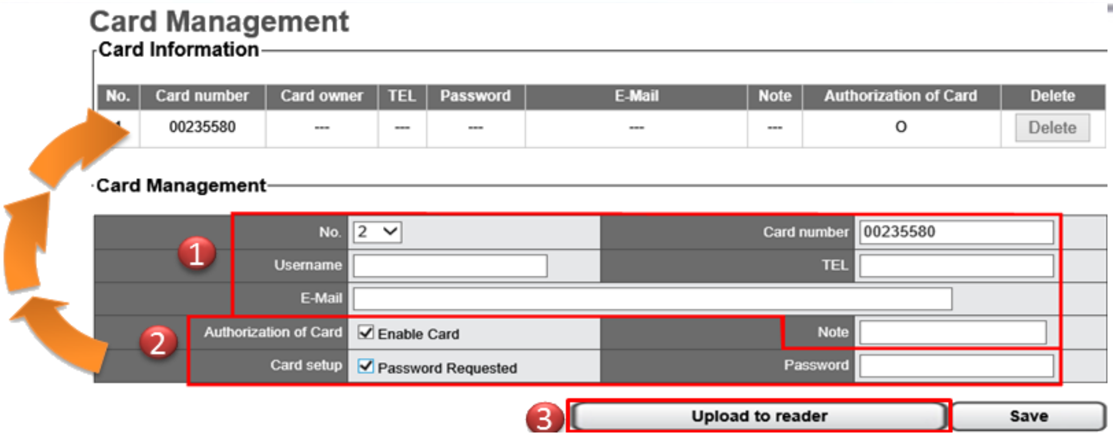


Device List

No.	Device Name	IP Address	Port	Brand	Model
1	Device 1	192.168.1.49	81	HUNDURE	RAC-960Px
2			80		
3			80		
4			80		

NVR offers two methods to add card information to card reader: **Add Individually** and **Group Adding**.

[Method 1] Add Individually:



Card Management

Card Information

No.	Card number	Card owner	TEL	Password	E-Mail	Note	Authorization of Card	Delete
1	00235580	---	---	---	---	---	O	Delete

Card Management

No.	2	Card number	00235580
Username		TEL	
E-Mail			
Authorization of Card	☑ Enable Card	Note	
Card setup	☑ Password Requested	Password	

(1) Fill in **Card Number** and other optional card information such as Username, TEL, E-mail address.

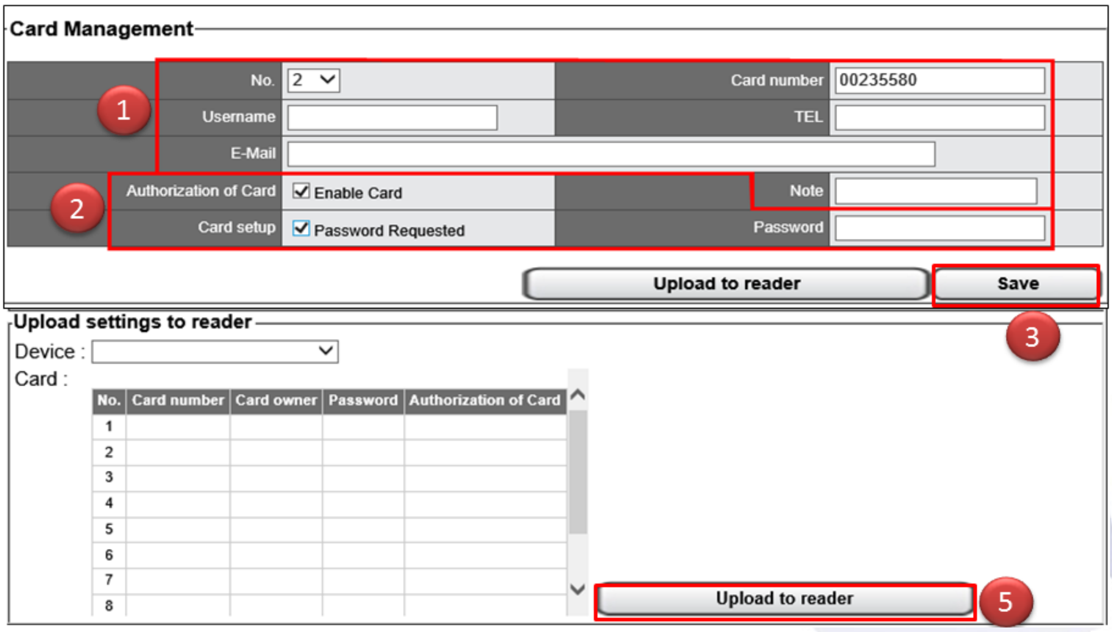
(2) Set up the authorization of card:

- **Enable Card:** to make this card get access permission
- **Password requested:** to enter numbers to strengthen access security level

(3) Click “**Upload to reader**” to directly upload card information to the device

New card information will be updated to reader.

[Method 2] Group Adding:



Card Management

No.	2	Card number	00235580
Username		TEL	
E-Mail			
Authorization of Card	☑ Enable Card	Note	
Card setup	☑ Password Requested	Password	

Upload settings to reader

Device :

Card :

No.	Card number	Card owner	Password	Authorization of Card
1				
2				
3				
4				
5				
6				
7				
8				

(1) Fill in **Card Number** and other optional card information such as Username, TEL, E-mail address.

(2) Set up the authorization of card:

- **Enable Card:** to make this card get access permission
- **Password requested:** to enter numbers to strengthen access security level

(3) Click “**Save**” to directly upload card information to the device

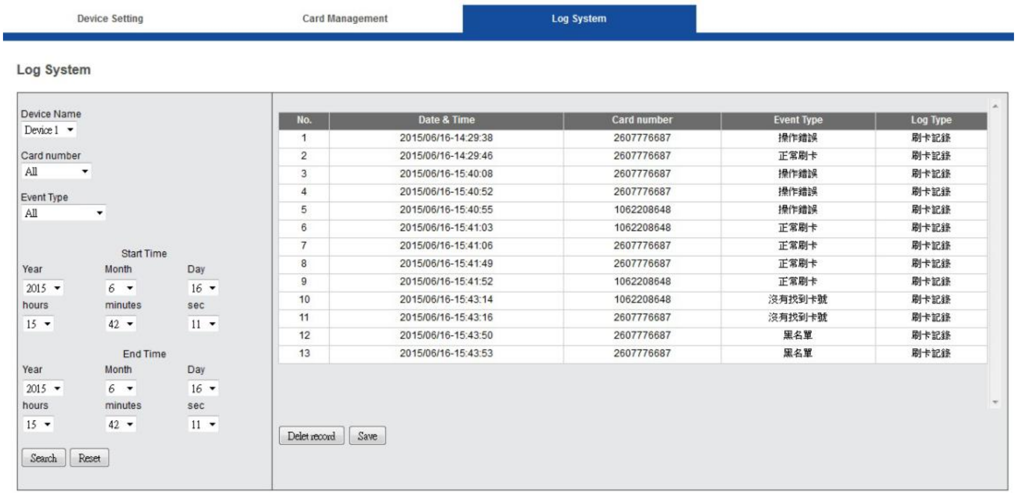
(4) Follow (1)~(3) to add more card information

(5) Click “**Upload to reader**” to directly upload card information to the device

All new card information will be updated to reader.

3. Log System

Log system allows users to easily check historical access information and export desired data to your PC.


Device Setting
Card Management
Log System
Log System
Search
Reset
Delet record
Save

Device Name: Device 1
Card number: All
Event Type: All

Start Time
Year: 2015 Month: 6 Day: 16
hours: 15 minutes: 42 sec: 11

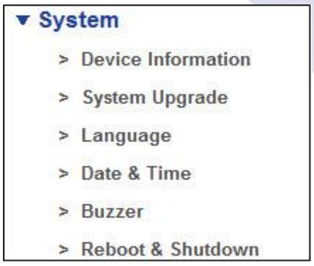
End Time
Year: 2015 Month: 6 Day: 16
hours: 15 minutes: 42 sec: 11

No.	Date & Time	Card number	Event Type	Log Type
1	2015/06/16-14:29:38	2607776687	操作錯誤	刷卡記錄
2	2015/06/16-14:29:46	2607776687	正常刷卡	刷卡記錄
3	2015/06/16-15:40:08	2607776687	操作錯誤	刷卡記錄
4	2015/06/16-15:40:52	2607776687	操作錯誤	刷卡記錄
5	2015/06/16-15:40:55	1062208648	操作錯誤	刷卡記錄
6	2015/06/16-15:41:03	1062208648	正常刷卡	刷卡記錄
7	2015/06/16-15:41:06	2607776687	正常刷卡	刷卡記錄
8	2015/06/16-15:41:49	2607776687	正常刷卡	刷卡記錄
9	2015/06/16-15:41:52	1062208648	正常刷卡	刷卡記錄
10	2015/06/16-15:43:14	1062208648	沒有找到卡號	刷卡記錄
11	2015/06/16-15:43:16	2607776687	沒有找到卡號	刷卡記錄
12	2015/06/16-15:43:50	2607776687	黑名單	刷卡記錄
13	2015/06/16-15:43:53	2607776687	黑名單	刷卡記錄

Select **Device, Card number, Event type**, **Start/End time** and click “**Search**” button to start searching log information. You may save log information to your computer by clicking “**Save**” button.

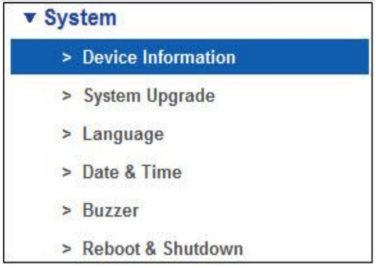
⚠ **Note:** Due to the design of HUNDURE’s access control system, when user uses data filter function on log system page, data saved in access control device will be deleted and saved in NVR.

5.7 System


▼ System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown

5.7.1 Device Information

Please select “**Device Information**” from the drop-down menu of **System** to begin.

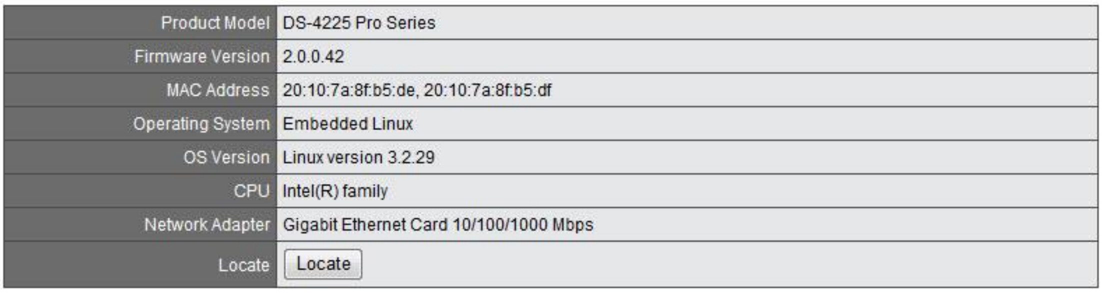

▼ System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown

- **System Information**

System Information shows **Operating System**, **OS Version**, **NVR Version**, **CPU**, **Network Adapter**, **MAC Address**, and **Network Flow**.

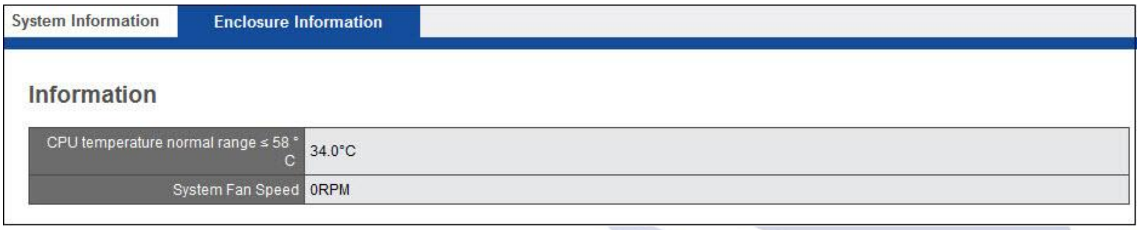
Locate

Click "Locate", the NVR buzzer will be triggered for 3 seconds. It helps the user to locate the NVR.



Product Model	DS-4225 Pro Series
Firmware Version	2.0.0.42
MAC Address	20:10:7a:8f:b5:de, 20:10:7a:8f:b5:df
Operating System	Embedded Linux
OS Version	Linux version 3.2.29
CPU	Intel(R) family
Network Adapter	Gigabit Ethernet Card 10/100/1000 Mbps
Locate	Locate

- **Enclosure Information**


System Information
Enclosure Information

Information

CPU temperature normal range ≤ 58 °C	34.0°C
System Fan Speed	0RPM

Enclosure Information shows **CPU Temperature** and **System Fan Speed**.

⚠ **Note**: Temperature of operation environment for NVR is 0~40˚C.

⚠

5.7.2 System Upgrade

Users can do NVR firmware upgrade via **Remote Web Browser** (Windows IE/Chrome/Opera browser) or **Local Display** (connect directly to a local monitor via HDMI, DVI or VGA connector).

⚠ **Note**: Please make sure the NVR model and the firmware version are correct.

⚠ **Note**: Please **reboot** NVR before upgrading to accelerate and to save your process time. To successfully add all new features, it is strongly suggested to upgrade the firmware **within three versions each time**, and necessarily **via v2.1.0.49** before upgrading to the latest firmware version. Since NVR has important enhancement in v2.1.0.49.

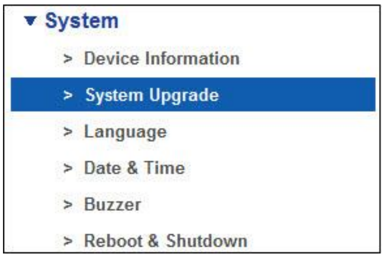
For example, if your current firmware version is v2.0.0.45, please do the upgrade from 2.0.0.45→2.0.0.46 or 2.0.0.47 or 2.1.0.48→2.1.0.49→2.1.0.50 or 2.1.0.51 or 2.1.0.52→2.1.0.53

1. **Upgrade via Remote Web Browser in Windows OS** (IE / Chrome / Firefox / Safari/ Opera browser)

(1) Download latest firmware file from website and save the firmware file to a local computer.

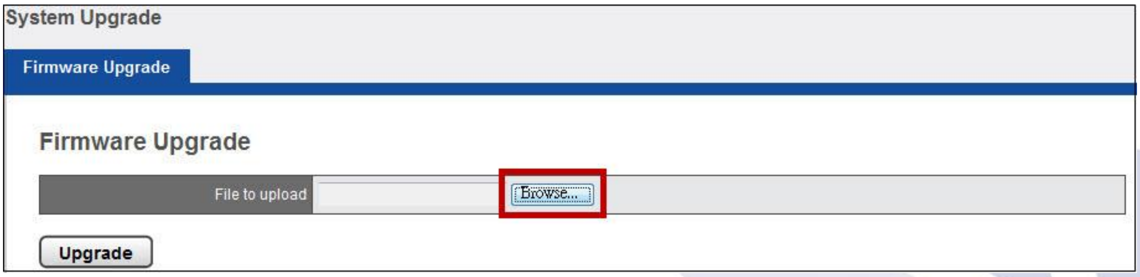
(2) Completely unzip the file

(3) Go to "Configuration" page→Select drop-down menu of **"System"**→"**System Upgrade**" to begin.

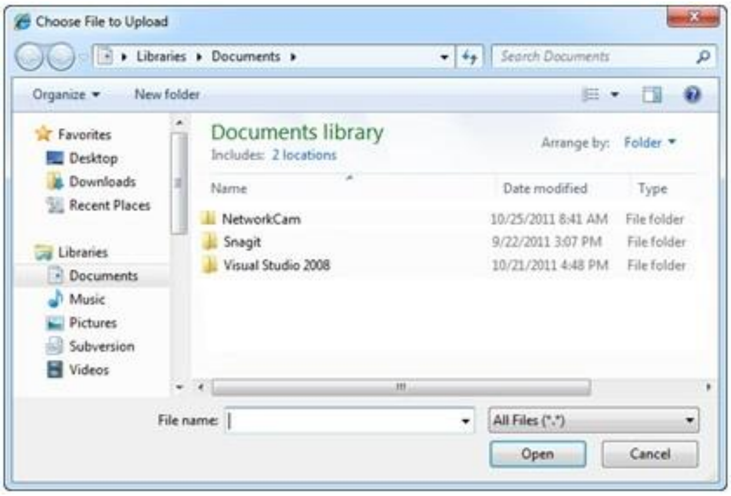

▼ System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown

(4) Press "**Browse**" to find the latest firmware

After downloading the firmware file, users can upgrade new firmware from a folder of local computer and browse the folder to upload it.


System Upgrade
Firmware Upgrade
Firmware Upgrade
File to upload
Browse...
Upgrade

A window will pop up to ask for the folder to upload the firmware.

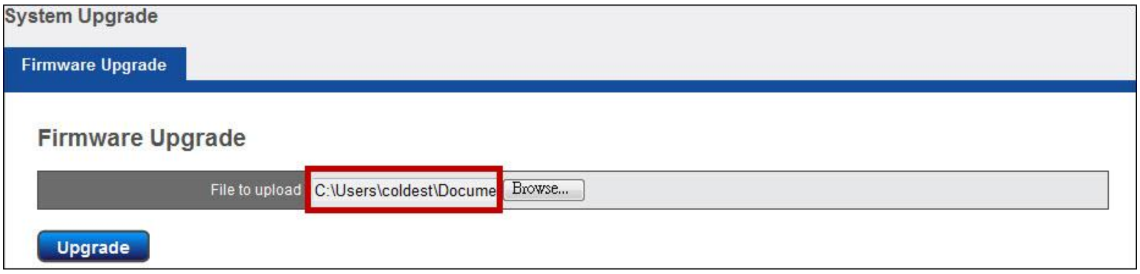

Choose File to Upload
Libraries ▸ Documents ▸
Search Documents
Organize ▾
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Subversion
Videos
Documents library
Includes: 2 locations
Arrange by: Folder ▾
All Files (*.*)
Open
Cancel

Name	Date modified	Type
NetworkCam	10/25/2011 8:41 AM	File folder
Snagit	9/22/2011 3:07 PM	File folder
Visual Studio 2008	10/21/2011 4:48 PM	File folder

File name:

(5) Click “**Upgrade**”

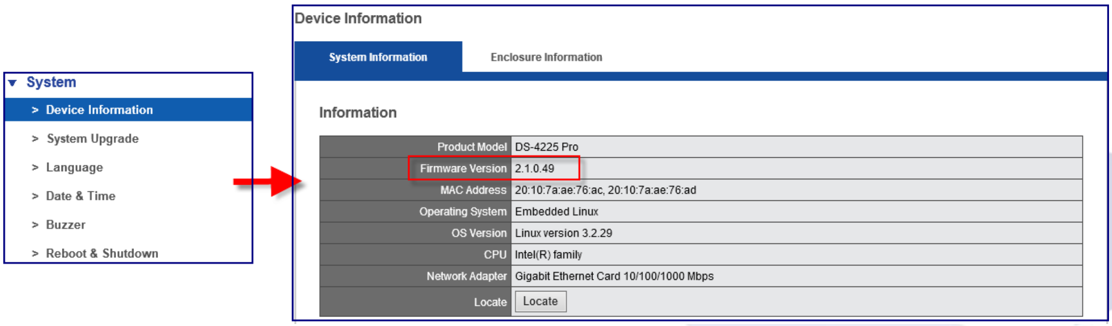
After selecting the file, please click “**Upgrade**” to renew the NVR.


System Upgrade
Firmware Upgrade
Firmware Upgrade
Browse...
Upgrade

File to upload: C:\Users\coldest\Docume

Once system upgrade is finished, NVR will reboot itself.

Users could go to “Device Information” from the drop down list of “System” so as to double check NVR firmware version.


▾ System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown
Device Information
System Information
Enclosure Information
Information
Locate

Product Model	DS-4225 Pro
Firmware Version	2.1.0.49
MAC Address	20:10:7a:ae:76:ac, 20:10:7a:ae:76:ad
Operating System	Embedded Linux
OS Version	Linux version 3.2.29
CPU	Intel(R) family
Network Adapter	Gigabit Ethernet Card 10/100/1000 Mbps
Locate	Locate

2. **Upgrade via Local Display**(directly connect to a local monitorvia HDMI, DVI or VGA connector)

⚠ **Note**: Upgrade via Local Display is supported in Pro+ series and Pro series.

(1) Download latest firmware file from website and save the firmware file to a

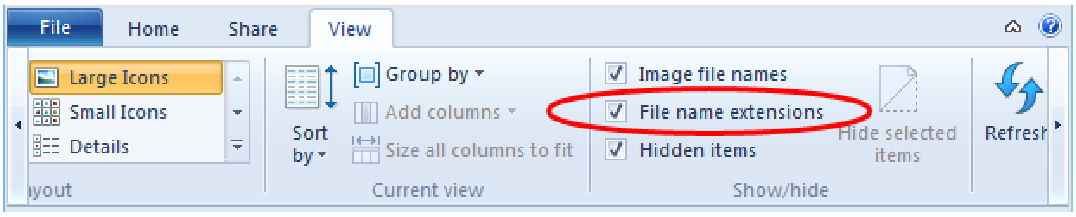
local computer.

(2) Completely unzip the file, and save it to USB device

Please save the file to your USB device after downloading and unzipping the firmware.

Note: If you want to upgrade the NVR via USB device on local display UI, after downloading and unzipping the file, please rename the unzipped .bin file name to "**update**" in the USB device, in order to have it recognized by the local NVR correctly.

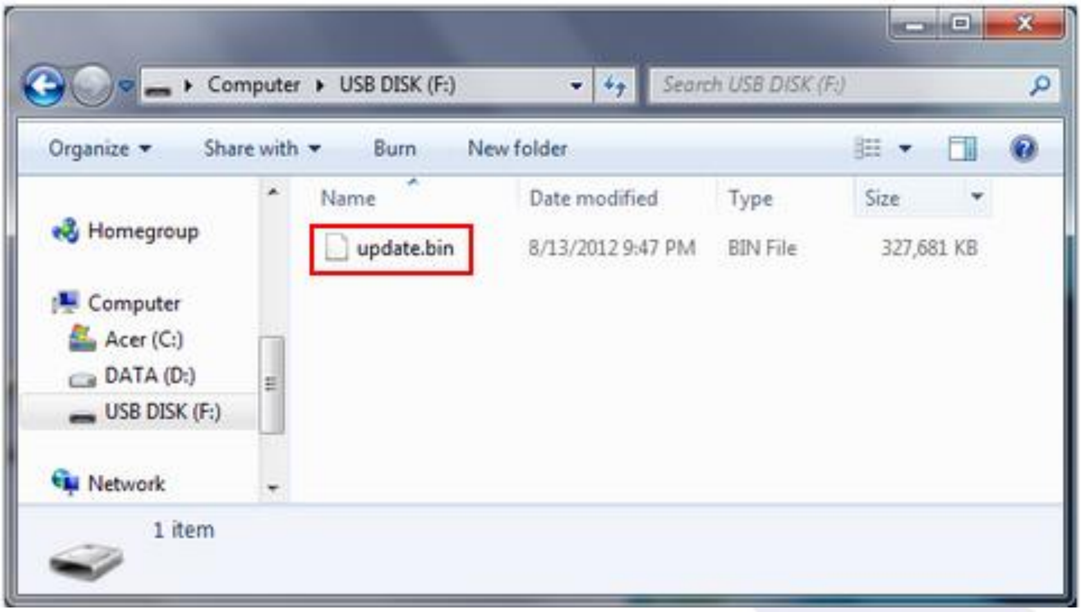
Note: If you enable **File name extensions**, the file name will become "**update.bin**"


File
Home
Share
View
Large Icons
Small Icons
Details
yout
Sort by
Group by
Add columns
Size all columns to fit
Current view
Hide selected items
Refresh
Show/hide

☑ Image file names

☑ File name extensions

☑ Hidden items


Computer ▸ USB DISK (F:)
Search USB DISK (F:)
Organize
Share with
Burn
New folder
Homegroup
Computer
Acer (C:)
DATA (D:)
USB DISK (F:)
Network
Name
Date modified
Type
Size
1 item

Name	Date modified	Type	Size
update.bin	8/13/2012 9:47 PM	BIN File	327,681 KB

Note: To recognize the USB device well, please **format the USB device to FAT32 file system** first, and make sure you delete all other files and keep only "**update.bin**" when you enable **File name extensions**.

Instructions to format a USB device to FAT32 file system:

I. Click on the "My Computer" shortcut on the desktop of your computer

II. Right-click the flash drive and choose the "Format" option

III. Change the selection under "File System" to FAT32

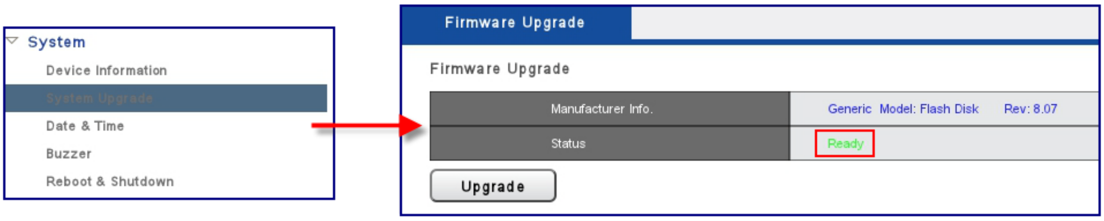
IV. Click the "Start" button to begin the formatting process

(3) Connect NVR to a monitor and insert USB device to the port of NVR

To start local display upgrade, please connect NVR to a monitor (via HDMI or VGA) and insert USB device to the USB port of NVR.

(4) Power on the monitor and NVR, and log in NVR.

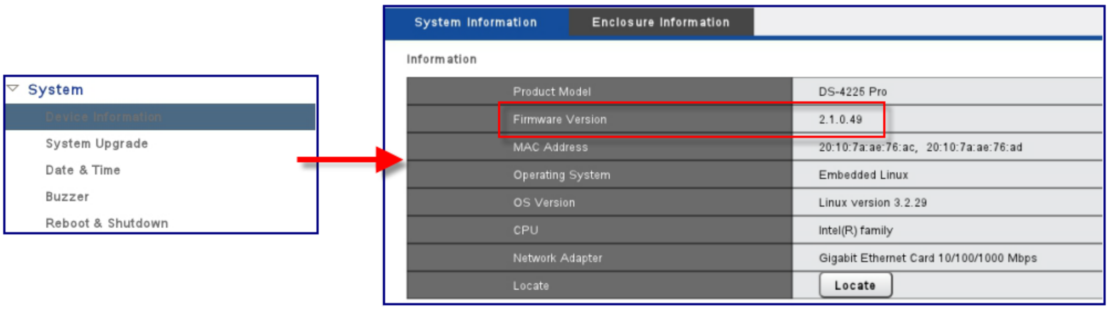
(5) Go to "**Configuration**" page, and then select "**System Upgrade**". When the interface shows device is ‘**ready**’, you can start upgrading NVR.


System
Device Information
System Upgrade
Date & Time
Buzzer
Reboot & Shutdown
Firmware Upgrade
Firmware Upgrade
Upgrade

Manufacturer Info.	Generic Model: Flash Disk Rev: 8.07
Status	Ready

(6) Once firmware upgrade finishes, NVR will reboot itself.

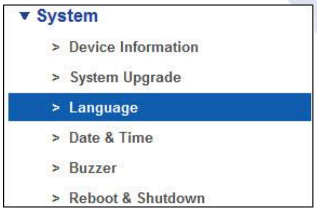
Users could go to “**Device Information**” from the drop down list of “**System**” so as to double check NVR firmware version.


System
Device Information
System Upgrade
Date & Time
Buzzer
Reboot & Shutdown
System Information
Enclosure Information
Information
Locate

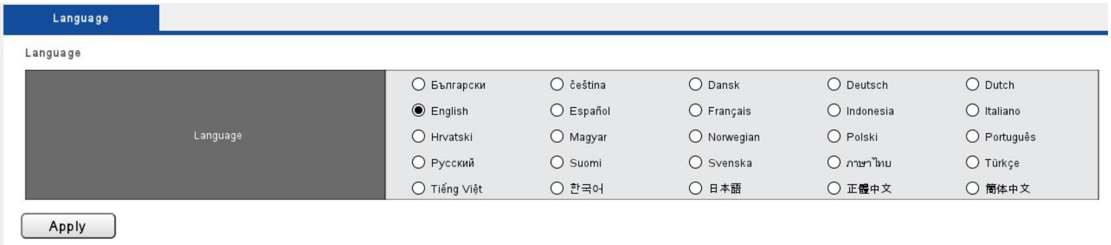
Product Model	DS-4225 Pro
Firmware Version	2.1.0.49
MAC Address	20:10:7a:ae:76:ac, 20:10:7a:ae:76:ad
Operating System	Embedded Linux
OS Version	Linux version 3.2.29
CPU	Intel(R) family
Network Adapter	Gigabit Ethernet Card 10/100/1000 Mbps
Locate	Locate

5.7.3 Language

Please select “**Language**” from the drop-down menu of **System** to begin.


System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown

NVR provides different languages for users. Users can configure the language as **AUTO** or other languages.



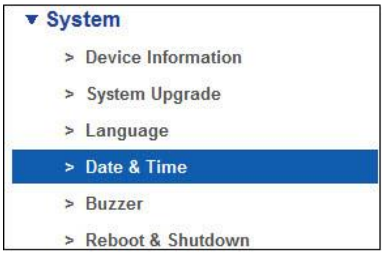
Language

○ Български	○ čeština	○ Dansk	○ Deutsch	○ Dutch
● English	○ Español	○ Français	○ Indonesia	○ Italiano
○ Hrvatski	○ Magyar	○ Norwegian	○ Polski	○ Português
○ Русский	○ Suomi	○ Svenska	○ ภาษาไทย	○ Türkçe
○ Tiếng Việt	○ 한국어	○ 日本語	○ 正體中文	○ 簡体中文

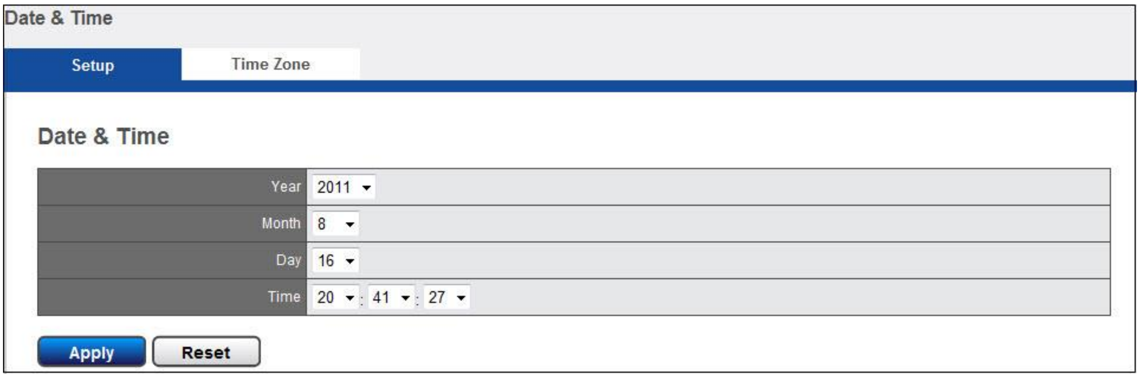
Please click “**Apply**” and the language will be changed.

5.7.4 Date &Time

Please select “**Date & Time**” from the drop-down menu of **System** to begin.


System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown

1. Set up

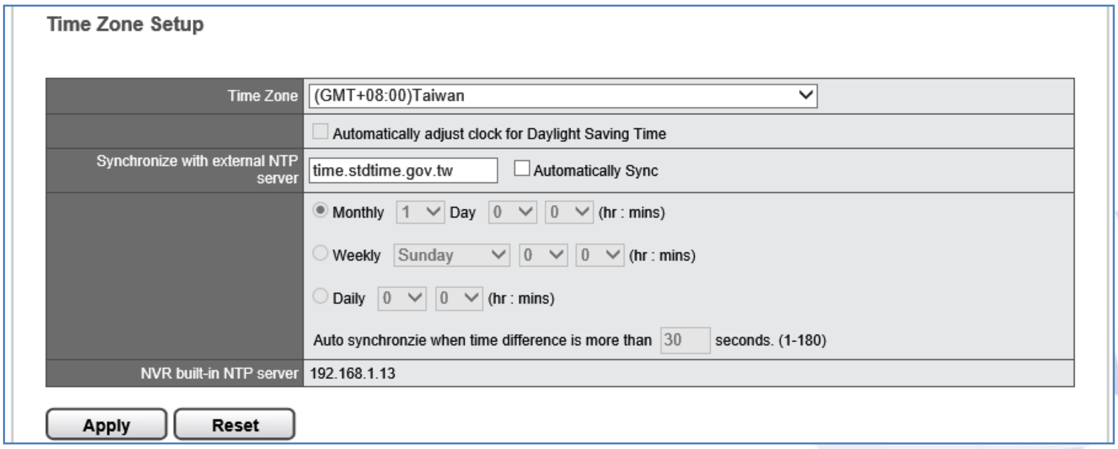

Date & Time
Setup
Time Zone
Apply
Reset

Date & Time

Year	2011
Month	8
Day	16
Time	20 : 41 : 27

Select from the drop-down list and configure the time manually and the setting will be effective when you click “**Apply**”.

2. Time zone

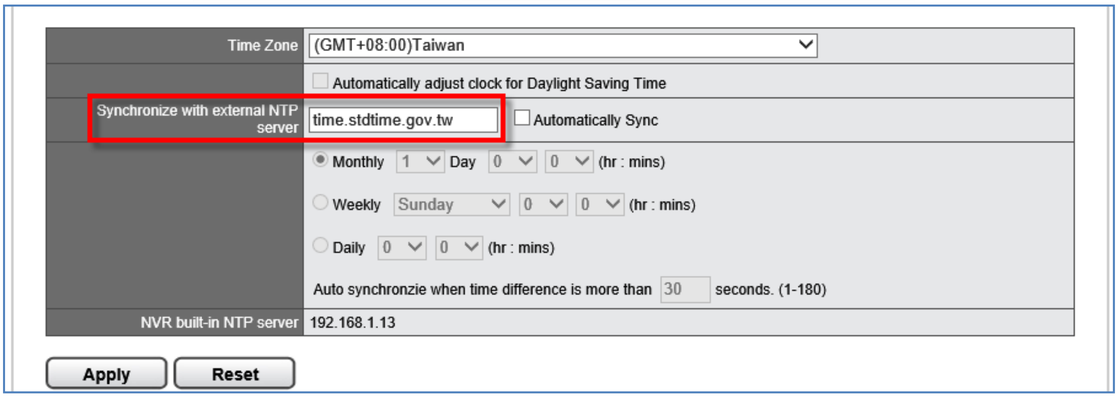

Apply
Reset

Time Zone Setup

Time Zone	(GMT+08:00)Taiwan
	☐ Automatically adjust clock for Daylight Saving Time
Synchronize with external NTP server	time.stdtime.gov.tw ☐ Automatically Sync
	● Monthly 1 Day 0 0 (hr : mins) ○ Weekly Sunday 0 0 (hr : mins) ○ Daily 0 0 (hr : mins) Auto synchronzie when time difference is more than 30 seconds. (1-180)
NVR built-in NTP server	192.168.1.13

Users can set the time and date according to the correct time zone and adjust clock for daylight saving changes for your preference.

Please enter the hostname of a valid NTP server to synchronize with external NTP server.



Time Zone: (GMT+08:00)Taiwan

☐ Automatically adjust clock for Daylight Saving Time

Synchronize with external NTP server: time.stdtime.gov.tw ☐ Automatically Sync

● Monthly 1 Day 0 0 (hr : mins)

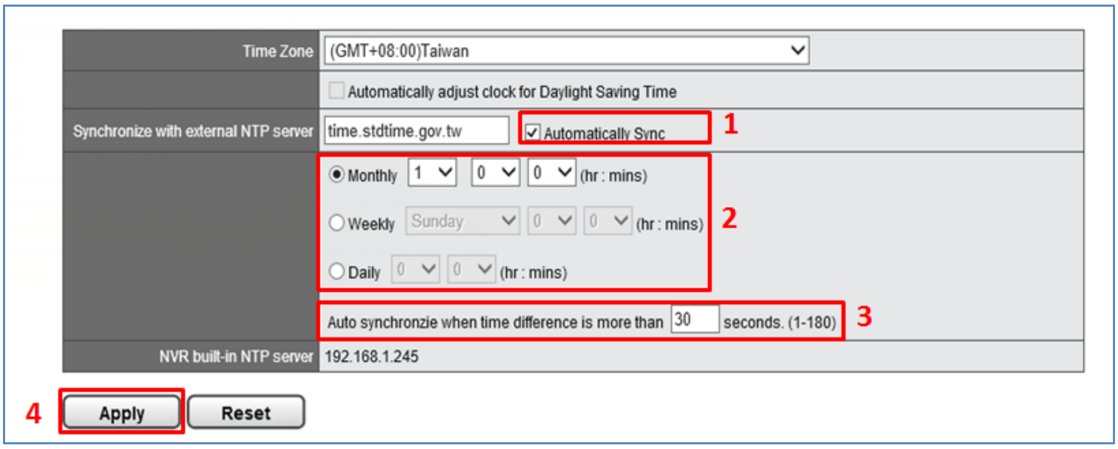
○ Weekly Sunday 0 0 (hr : mins)

○ Daily 0 0 (hr : mins)

Auto synchronzie when time difference is more than 30 seconds. (1-180)

NVR built-in NTP server: 192.168.1.13

- **Automatically sync**
- Users can also decide when to automatically synchronize with external NTP sever by selecting “Automatically Sync.” Based on users’ preference, NVR provides three selections to automatically synchronize with external NTP server: **Monthly**, **Weekly** or **Daily**



Time Zone: (GMT+08:00)Taiwan

☐ Automatically adjust clock for Daylight Saving Time

Synchronize with external NTP server: time.stdtime.gov.tw ☑ Automatically Sync

● Monthly 1 0 0 (hr : mins)

○ Weekly Sunday 0 0 (hr : mins)

○ Daily 0 0 (hr : mins)

Auto synchronzie when time difference is more than 30 seconds. (1-180)

NVR built-in NTP server: 192.168.1.245

(1) Select “Automatically Sync”

(2) Set up when to automatically synchronize with external NTP sever

(3) Fill in the number to start auto synchronize when time difference is over user defined seconds

(4) Click “Apply” button to save setting

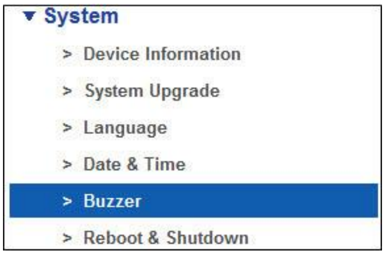
⚠ **Note:** The file recorded in overlapping time will be saved in “time overlap” after NVR synchronized with NTP server

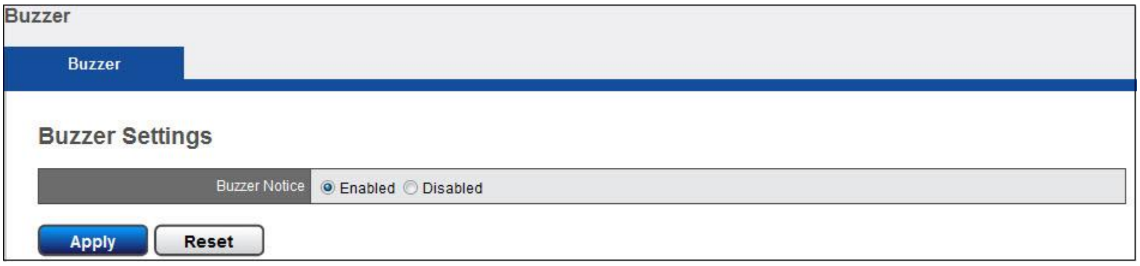
- **Built-in NTP server in NVR**

To ensure the accuracy of time, NVR provides NTP server function for client device to synchronize the time clock. The built-in NTP server address follows NVR IP address.

5.7.5 Buzzer

Please select “**Buzzer**” from the drop-down menu of **System** to begin.


▾ System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown


Buzzer
Buzzer
Buzzer Settings
Apply
Reset

Buzzer Notice ● Enabled ○ Disabled

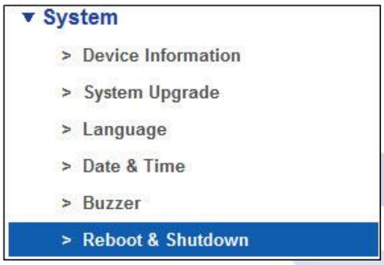
Select “**Enable**” or “**Disable**” to set Buzzer Notice.

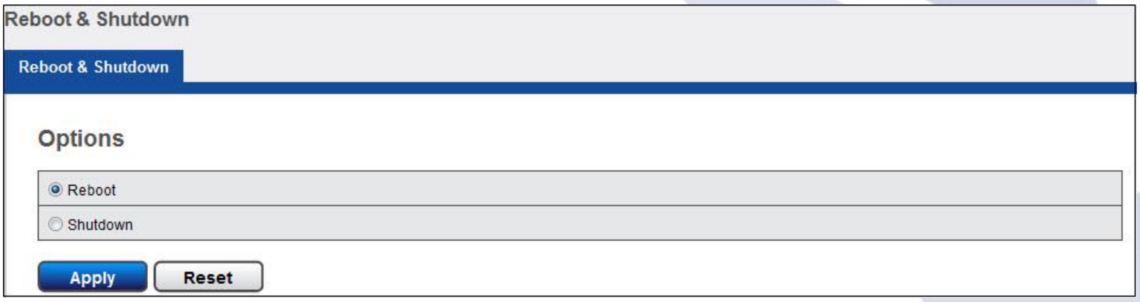
Once the buzzer notice is enabled, the buzzer will have beep sound in HDD or NVR hardware failure situation.

⚠**Note**: To stop the buzzer sound, user can press “**USB BACKUP**” button on the front panel of NVR for one second.

5.7.6 Reboot &Shutdown

Please select “**Reboot & Shutdown**” from the drop-down menu of **System** to begin.


▾ System
> Device Information
> System Upgrade
> Language
> Date & Time
> Buzzer
> Reboot & Shutdown


Reboot & Shutdown
Reboot & Shutdown
Options
Apply
Reset

● Reboot
○ Shutdown

Click “**Reboot**” to restart the NVR.

Click “**Shutdown**” to turn off the NVR.

Appendix: Notice and Warning

Notice

＊This equipment is for home use, and has acquired the electromagnetic conformity registration. So, it can be used not only in residential area, but also other areas.

＊이기기는가정용(B 급) 전자파적합기기로서주로가정에서사용하는것을목적으로하며, 모든지역에서사용할수있습니다.

Warning

＊Risk of explosion if battery is replaced by an incorrect type. Please dispose of used batteries according to the instructions.